

109TH CONGRESS
1ST SESSION

H. R. 3039

To enact title 51, United States Code, “National and Commercial Space Programs”, as positive law.

IN THE HOUSE OF REPRESENTATIVES

JUNE 22, 2005

Mr. SENSENBRENNER (for himself and Mr. CONYERS) introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To enact title 51, United States Code, “National and Commercial Space Programs”, as positive law.

1 *Be it enacted by the Senate and House of Representatives of the United*
2 *States of America in Congress assembled,*

3 **SECTION 1. TABLE OF CONTENTS.**

4 The table of contents for this Act is as follows:

- Sec. 1. Table of contents.
- Sec. 2. Purpose; conformity with original intent.
- Sec. 3. Enactment of title 51, United States Code.
- Sec. 4. Conforming amendments to other laws.
- Sec. 5. Transitional and savings provisions.
- Sec. 6. Repeals.

5 **SEC. 2. PURPOSE; CONFORMITY WITH ORIGINAL INTENT.**

6 (a) PURPOSE.—The purpose of this Act is to codify certain existing laws
7 related to national and commercial space programs as a positive law title
8 of the United States Code.

9 (b) CONFORMITY WITH ORIGINAL INTENT.—In the codification of laws
10 by this Act, the intent is to conform to the understood policy, intent, and
11 purpose of Congress in the original enactments, with such amendments and
12 corrections as will remove ambiguities, contradictions, and other imperfec-

tions, in accordance with section 205(c)(1) of House Resolution No. 988,
93d Congress, as enacted into law by Public Law 93–554 (2 U.S.C.
285b(1)).

SEC. 3. ENACTMENT OF TITLE 51, UNITED STATES CODE.

Title 51, United States Code, “National and Commercial Space Pro-
grams”, is enacted as follows:

**TITLE 51—NATIONAL AND COMMERCIAL
SPACE PROGRAMS**

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CHAPTER 1—DEFINITIONS

Sec.

101. Definitions.

§ 101. Definitions

In this title:

(1) ADMINISTRATION.—The term “Administration” means the Na-
tional Aeronautics and Space Administration.

(2) ADMINISTRATOR.—The term “Administrator” means the Admin-
istrator of the National Aeronautics and Space Administration.

**CHAPTER 3—NATIONAL AERONAUTICS AND SPACE
PROGRAM**

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1 SUBCHAPTER I—SHORT TITLE, DECLARATION OF POLICY, AND 2 DEFINITIONS

3 **§ 301. Short title**

4 This chapter may be cited as the “National Aeronautics and Space Act”.

5 **§ 302. Congressional declaration of policy and purpose**

6 (a) DEVOTION OF SPACE ACTIVITIES TO PEACEFUL PURPOSES FOR BEN-
7 EFIT OF ALL HUMANKIND.—Congress declares that it is the policy of the
8 United States that activities in space should be devoted to peaceful purposes
9 for the benefit of all humankind.

10 (b) AERONAUTICAL AND SPACE ACTIVITIES FOR WELFARE AND SECU-
11 RITY OF UNITED STATES.—Congress declares that the general welfare and
12 security of the United States require that adequate provision be made for
13 aeronautical and space activities. Congress further declares that such activi-
14 ties shall be the responsibility of, and shall be directed by, a civilian agency
15 exercising control over aeronautical and space activities sponsored by the
16 United States, except that activities peculiar to or primarily associated with
17 the development of weapons systems, military operations, or the defense of
18 the United States (including the research and development necessary to
19 make effective provision for the defense of the United States) shall be the
20 responsibility of, and shall be directed by, the Department of Defense; and
21 that determination as to which agency has responsibility for and direction
22 of any such activity shall be made by the President.

23 (c) COMMERCIAL USE OF SPACE.—Congress declares that the general
24 welfare of the United States requires that the Administration seek and en-
25 courage, to the maximum extent possible, the fullest commercial use of
26 space.

27 (d) OBJECTIVES OF AERONAUTICAL AND SPACE ACTIVITIES.—The aero-
28 nautical and space activities of the United States shall be conducted so as
29 to contribute materially to one or more of the following objectives:

30 (1) The expansion of human knowledge of the Earth and of phe-
31 nomena in the atmosphere and space.

32 (2) The improvement of the usefulness, performance, speed, safety,
33 and efficiency of aeronautical and space vehicles.

34 (3) The development and operation of vehicles capable of carrying in-
35 struments, equipment, supplies, and living organisms through space.

(4) The establishment of long-range studies of the potential benefits to be gained from, the opportunities for, and the problems involved in the utilization of aeronautical and space activities for peaceful and scientific purposes.

(5) The preservation of the role of the United States as a leader in aeronautical and space science and technology and in the application thereof to the conduct of peaceful activities within and outside the atmosphere.

(6) The making available to agencies directly concerned with national defense of discoveries that have military value or significance, and the furnishing by such agencies, to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency.

(7) Cooperation by the United States with other nations and groups of nations in work done pursuant to this chapter and in the peaceful application of the results thereof.

(8) The most effective utilization of the scientific and engineering resources of the United States, with close cooperation among all interested agencies of the United States in order to avoid unnecessary duplication of effort, facilities, and equipment.

(9) The preservation of the United States preeminent position in aeronautics and space through research and technology development related to associated manufacturing processes.

(e) GROUND PROPULSION SYSTEMS RESEARCH AND DEVELOPMENT.—Congress declares that the general welfare of the United States requires that the unique competence in scientific and engineering systems of the Administration also be directed toward ground propulsion systems research and development. Such development shall be conducted so as to contribute to the objectives of developing energy and petroleum-conserving ground propulsion systems, and of minimizing the environmental degradation caused by such systems.

(f) BIOENGINEERING RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAMS.—Congress declares that the general welfare of the United States requires that the unique competence of the Administration in science and engineering systems be directed to assisting in bioengineering research, development, and demonstration programs designed to alleviate and minimize the effects of disability.

(g) PURPOSE OF CHAPTER.—It is the purpose of this chapter to carry out and effectuate the policies declared in subsections (a) to (f).

§ 303. Definitions

In this chapter:

(1) AERONAUTICAL AND SPACE ACTIVITIES.—The term “aeronautical and space activities” means—

(A) research into, and the solution of, problems of flight within and outside the Earth’s atmosphere;

(B) the development, construction, testing, and operation for research purposes of aeronautical and space vehicles;

(C) the operation of a space transportation system including the space shuttle, upper stages, space platforms, and related equipment; and

(D) such other activities as may be required for the exploration of space.

(2) AERONAUTICAL AND SPACE VEHICLES.—The term “aeronautical and space vehicles” means aircraft, missiles, satellites, and other space vehicles, manned and unmanned, together with related equipment, devices, components, and parts.

SUBCHAPTER II—COORDINATION OF AERONAUTICAL AND SPACE ACTIVITIES

§ 311. National Aeronautics and Space Administration

(a) ESTABLISHMENT AND APPOINTMENT OF ADMINISTRATOR.—There is established the National Aeronautics and Space Administration. The Administration shall be headed by an Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate. Under the supervision and direction of the President, the Administrator shall be responsible for the exercise of all powers and the discharge of all duties of the Administration and shall have authority and control over all personnel and activities thereof.

(b) DEPUTY ADMINISTRATOR.—There shall be in the Administration a Deputy Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate. The Deputy Administrator shall perform such duties and exercise such powers as the Administrator may prescribe. The Deputy Administrator shall act for, and exercise the powers of, the Administrator during the Administrator’s absence or disability.

(c) RESTRICTION ON OTHER BUSINESS OR EMPLOYMENT.—The Administrator and the Deputy Administrator shall not engage in any other business, vocation, or employment while serving as such.

§ 312. Functions of the Administration

(a) PLANNING, DIRECTING, AND CONDUCTING AERONAUTICAL AND SPACE ACTIVITIES.—The Administration, in order to carry out the purpose of this chapter, shall—

(1) plan, direct, and conduct aeronautical and space activities;

(2) arrange for participation by the scientific community in planning scientific measurements and observations to be made through use of aeronautical and space vehicles, and conduct or arrange for the conduct of such measurements and observations;

(3) provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof;

(4) seek and encourage, to the maximum extent possible, the fullest commercial use of space; and

(5) encourage and provide for Federal Government use of commercially provided space services and hardware, consistent with the requirements of the Federal Government.

(b) RESEARCH AND DEVELOPMENT IN CERTAIN TECHNOLOGIES.—

(1) GROUND PROPULSION TECHNOLOGIES.—The Administration shall, to the extent of appropriated funds, initiate, support, and carry out such research, development, demonstration, and other related activities in ground propulsion technologies as are provided for in sections 4 to 10 of the Electric and Hybrid Vehicle Research, Development, and Demonstration Act of 1976 (15 U.S.C. 2503 to 2509).

(2) SOLAR HEATING AND COOLING TECHNOLOGIES.—The Administration shall initiate, support, and carry out such research, development, demonstrations, and other related activities in solar heating and cooling technologies (to the extent that funds are appropriated therefor) as are provided for in sections 5, 6, and 9 of the Solar Heating and Cooling Demonstration Act of 1974 (42 U.S.C. 5503, 5504, 5507).

§ 313. Powers of the Administration in performance of functions

(a) RULES AND REGULATIONS.—In the performance of its functions, the Administration is authorized to make, promulgate, issue, rescind, and amend rules and regulations governing the manner of its operations and the exercise of the powers vested in it by law.

(b) OFFICERS AND EMPLOYEES.—In the performance of its functions, the Administration is authorized to appoint and fix the compensation of officers and employees as may be necessary to carry out such functions. The officers and employees shall be appointed in accordance with the civil service laws and their compensation fixed in accordance with chapter 51 and subchapter III of chapter 53 of title 5, except that—

(1) to the extent the Administrator deems such action necessary to the discharge of the Administrator's responsibilities, the Administrator may appoint not more than 425 of the scientific, engineering, and administrative personnel of the Administration without regard to such laws, and may fix the compensation of such personnel not in excess of

the rate of basic pay payable for level III of the Executive Schedule;
and

(2) to the extent the Administrator deems such action necessary to recruit specially qualified scientific and engineering talent, the Administrator may establish the entrance grade for scientific and engineering personnel without previous service in the Federal Government at a level up to 2 grades higher than the grade provided for such personnel under the General Schedule, and fix their compensation accordingly.

(c) PROPERTY.—In the performance of its functions, the Administration is authorized—

(1) to acquire (by purchase, lease, condemnation, or otherwise), construct, improve, repair, operate, and maintain laboratories, research and testing sites and facilities, aeronautical and space vehicles, quarters and related accommodations for employees and dependents of employees of the Administration, and such other real and personal property (including patents), or any interest therein, as the Administration deems necessary within and outside the continental United States;

(2) to acquire by lease or otherwise, through the Administrator of General Services, buildings or parts of buildings in the District of Columbia for the use of the Administration for a period not to exceed 10 years without regard to section 8141 of title 40;

(3) to lease to others such real and personal property;

(4) to sell and otherwise dispose of real and personal property (including patents and rights thereunder) in accordance with the provisions of chapters 1 to 11 of title 40 and in accordance with title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251 et seq.); and

(5) to provide by contract or otherwise for cafeterias and other necessary facilities for the welfare of employees of the Administration at its installations and purchase and maintain equipment therefor.

(d) GIFTS.—In the performance of its functions, the Administration is authorized to accept unconditional gifts or donations of services, money, or property, real, personal, or mixed, tangible or intangible.

(e) CONTRACTS, LEASES, AND AGREEMENTS.—In the performance of its functions, the Administration is authorized, without regard to subsections (a) and (b) of section 3324 of title 31, to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State, Territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution.

1 To the maximum extent practicable and consistent with the accomplishment
 2 of the purpose of this chapter, such contracts, leases, agreements, and other
 3 transactions shall be allocated by the Administrator in a manner which will
 4 enable small-business concerns to participate equitably and proportionately
 5 in the conduct of the work of the Administration.

6 (f) COOPERATION WITH FEDERAL AGENCIES AND OTHERS.—In the per-
 7 formance of its functions, the Administration is authorized to use, with their
 8 consent, the services, equipment, personnel, and facilities of Federal and
 9 other agencies with or without reimbursement, and on a similar basis to co-
 10 operate with other public and private agencies and instrumentalities in the
 11 use of services, equipment, and facilities. Each department and agency of
 12 the Federal Government shall cooperate fully with the Administration in
 13 making its services, equipment, personnel, and facilities available to the Ad-
 14 ministration, and any such department or agency is authorized, notwith-
 15 standing any other provision of law, to transfer to or to receive from the
 16 Administration, without reimbursement, aeronautical and space vehicles,
 17 and supplies and equipment other than administrative supplies or equip-
 18 ment.

19 (g) ADVISORY COMMITTEES.—In the performance of its functions, the
 20 Administration is authorized to appoint such advisory committees as may
 21 be appropriate for purposes of consultation and advice to the Administra-
 22 tion.

23 (h) OFFICES AND PROCEDURES.—In the performance of its functions, the
 24 Administration is authorized to establish within the Administration such of-
 25 fices and procedures as may be appropriate to provide for the greatest pos-
 26 sible coordination of its activities under this chapter with related scientific
 27 and other activities being carried on by other public and private agencies
 28 and organizations.

29 (i) TEMPORARY OR INTERMITTENT SERVICES OF EXPERTS OR CONSULT-
 30 ANTS.—In the performance of its functions, the Administration is author-
 31 ized to obtain services as provided by section 3109 of title 5, but at rates
 32 for individuals not to exceed the per diem rate equivalent to the maximum
 33 rate payable under section 5376 of title 5.

34 (j) ALIENS.—In the performance of its functions, the Administration is
 35 authorized, when determined by the Administrator to be necessary, and sub-
 36 ject to such security investigations as the Administrator may determine to
 37 be appropriate, to employ aliens without regard to statutory provisions pro-
 38 hibiting payment of compensation to aliens.

39 (k) CONCESSIONS FOR VISITORS' FACILITIES.—

40 (1) IN GENERAL.—In the performance of its functions, the Adminis-
 41 tration is authorized to provide by concession, without regard to section

1302 of title 40, on such terms as the Administrator may deem to be appropriate and necessary to protect the concessioner against loss of the concessioner's investment in property (but not anticipated profits) resulting from the Administration's discretionary acts and decisions, for the construction, maintenance, and operation of all manner of facilities and equipment for visitors to the several installations of the Administration and, in connection therewith, to provide services incident to the dissemination of information concerning its activities to such visitors, without charge or with a reasonable charge therefor (with this authority being in addition to any other authority that the Administration may have to provide facilities, equipment, and services for visitors to its installations).

(2) PUBLIC NOTICE AND DUE CONSIDERATION OF PROPOSALS.—A concession agreement under this subsection may be negotiated with any qualified proposer following due consideration of all proposals received after reasonable public notice of the intention to contract.

(3) REASONABLE OPPORTUNITY FOR PROFIT.—The concessioner shall be afforded a reasonable opportunity to make a profit commensurate with the capital invested and the obligations assumed. The consideration paid by the concessioner for the concession shall be based on the probable value of the opportunity and not on maximizing revenue to the United States.

(4) RECORDS AND ACCESS TO RECORDS.—Each concession agreement shall specify the manner in which the concessioner's records are to be maintained, and shall provide for access to the records by the Administration and the Comptroller General of the United States for a period of 5 years after the close of the business year to which the records relate.

(5) POSSESSORY INTERESTS.—A concessioner may be accorded a possessory interest, consisting of all incidents of ownership except legal title (which shall vest in the United States), in any structure, fixture, or improvement the concessioner constructs or locates upon land owned by the United States. With the approval of the Administration, such possessory interest may be assigned, transferred, encumbered, or relinquished by the concessioner, and, unless otherwise provided by contract, shall not be extinguished by the expiration or other termination of the concession and may not be taken for public use without just compensation.

(l) DETAILING MEMBERS OF ARMED SERVICES.—In the performance of its functions, the Administration is authorized, with the approval of the President, to enter into cooperative agreements under which members of the

1 Army, Navy, Air Force, and Marine Corps may be detailed by the appro-
 2 priate Secretary for services in the performance of functions under this
 3 chapter to the same extent as that to which they might be lawfully assigned
 4 in the Department of Defense.

5 (m) CLAIMS AGAINST THE UNITED STATES.—In the performance of its
 6 functions, the Administration is authorized—

7 (1) to consider, ascertain, adjust, determine, settle, and pay, on be-
 8 half of the United States, in full satisfaction thereof, any claim for
 9 \$25,000 or less against the United States for bodily injury, death, or
 10 damage to or loss of real or personal property resulting from the con-
 11 duct of the Administration's functions as specified in section 312(a) of
 12 this title, where such claim is presented to the Administration in writ-
 13 ing within 2 years after the accident or incident out of which the claim
 14 arises; and

15 (2) if the Administration considers that a claim in excess of \$25,000
 16 is meritorious and would otherwise be covered by this subsection, to re-
 17 port the facts and circumstances to Congress for its consideration.

18 **§ 314. International cooperation**

19 The Administration, under the foreign policy guidance of the President,
 20 may engage in a program of international cooperation in work done pursu-
 21 ant to this chapter, and in the peaceful application of the results thereof,
 22 pursuant to agreements made by the President with the advice and consent
 23 of the Senate.

24 **§ 315. Reports to Congress**

25 (a) PRESIDENTIAL REPORT.—The President shall transmit to Congress
 26 in May of each year a report, which shall include—

27 (1) a comprehensive description of the programmed activities and the
 28 accomplishments of all agencies of the United States in the field of aer-
 29 onautics and space activities during the preceding fiscal year; and

30 (2) an evaluation of such activities and accomplishments in terms of
 31 the attainment of, or the failure to attain, the objectives described in
 32 section 302(d) of this title.

33 (b) RECOMMENDATIONS FOR ADDITIONAL LEGISLATION.—Any report
 34 made under this section shall contain such recommendations for additional
 35 legislation as the Administrator or the President may consider necessary or
 36 desirable for the attainment of the objectives described in section 302(d) of
 37 this title.

38 (c) CLASSIFIED INFORMATION.—No information that has been classified
 39 for reasons of national security shall be included in any report made under
 40 this section, unless the information has been declassified by, or pursuant to
 41 authorization given by, the President.

1 **§ 316. Disposal of excess land**

2 Notwithstanding the provisions of this or any other law, the Administra-
3 tion may not report to a disposal agency as excess to the needs of the Ad-
4 ministration any land having an estimated value in excess of \$50,000 that
5 is owned by the United States and under the jurisdiction and control of the
6 Administration, unless—

7 (1) a period of 30 days has passed after the receipt by the Speaker
8 and the Committee on Science of the House of Representatives and the
9 President and the Committee on Commerce, Science, and Transpor-
10 tation of the Senate of a report by the Administrator or the Adminis-
11 trator's designee containing a full and complete statement of the action
12 proposed to be taken and the facts and circumstances relied upon in
13 support of such action; or

14 (2) each such committee before the expiration of that period has
15 transmitted to the Administrator written notice to the effect that the
16 committee has no objection to the proposed action.

17 SUBCHAPTER III—GENERAL ADMINISTRATIVE PROVISIONS

18 **§ 331. Public access to information**

19 (a) PUBLIC INSPECTION.—Information obtained or developed by the Ad-
20 ministrator in the performance of the Administrator's functions under this
21 chapter shall be made available for public inspection, except information—

- 22 (1) authorized or required by Federal statute to be withheld;
23 (2) classified to protect the national security; or
24 (3) described in subsection (b).

25 (b) SPECIAL HANDLING OF SECRET OR CONFIDENTIAL INFORMATION.—

26 (1) IN GENERAL.—The Administrator, for a period of up to 5 years
27 after the development of information described in paragraph (2), may
28 provide appropriate protections against the dissemination of such infor-
29 mation, including exemption from subchapter II of chapter 5 of title
30 5.

31 (2) INFORMATION DESCRIBED.—Information referred to in para-
32 graph (1) is information that results from activities conducted under
33 an agreement entered into under subsections (e) and (f) of section 313
34 of this title, and that would be a trade secret or commercial or financial
35 information that is privileged or confidential under the meaning of sec-
36 tion 552(b)(4) of title 5 if the information had been obtained from a
37 non-Federal party participating in such an agreement.

38 (c) COMMITTEES OF CONGRESS.—Nothing in this chapter authorizes the
39 withholding of information by the Administrator from the duly authorized
40 committees of Congress.

1 **§ 332. Security requirements**

2 The Administrator shall establish such security requirements, restrictions,
3 and safeguards as the Administrator deems necessary in the interest of the
4 national security. The Administrator may arrange with the Director of the
5 Office of Personnel Management for the conduct of such security or other
6 personnel investigations of the Administration's officers, employees, and
7 consultants, and its contractors and subcontractors and their officers and
8 employees, actual or prospective, as the Administrator deems appropriate.
9 If any such investigation develops any data reflecting that the individual
10 who is the subject of the investigation is of questionable loyalty, the matter
11 shall be referred to the Federal Bureau of Investigation for the conduct of
12 a full field investigation, the results of which shall be furnished to the Ad-
13 ministrator.

14 **§ 333. Permission to carry firearms**

15 As the Administrator deems necessary in the public interest, the Adminis-
16 trator may—

17 (1) direct officers and employees of the Administration to carry fire-
18 arms while in the conduct of their official duties; and

19 (2) authorize employees of contractors and subcontractors of the Ad-
20 ministration who are engaged in the protection of property owned by
21 the United States, and located at facilities owned by or contracted to
22 the United States, to carry firearms while in the conduct of their offi-
23 cial duties.

24 **§ 334. Arrest authority**

25 Under regulations prescribed by the Administrator and approved by the
26 Attorney General, employees of the Administration and of its contractors
27 and subcontractors authorized to carry firearms under section 333 of this
28 title may arrest without warrant for any offense against the United States
29 committed in their presence, or for any felony cognizable under the laws of
30 the United States if they have reasonable grounds to believe that the person
31 to be arrested has committed or is committing such felony. Persons granted
32 authority to make arrests by this section may exercise that authority only
33 while guarding and protecting property owned or leased by, or under the
34 control of, the United States under the administration and control of the
35 Administration or one of its contractors or subcontractors, at facilities
36 owned by or contracted to the Administration.

37 **§ 335. Property rights in inventions**

38 (a) DEFINITIONS.—In this section:

39 (1) CONTRACT.—The term “contract” means any actual or proposed
40 contract, agreement, understanding, or other arrangement, and in-

cludes any assignment, substitution of parties, or subcontract executed or entered into thereunder.

(2) MADE.—The term “made”, when used in relation to any invention, means the conception or first actual reduction to practice of such invention.

(3) PERSON.—The term “person” means any individual, partnership, corporation, association, institution, or other entity.

(b) EXCLUSIVE PROPERTY OF UNITED STATES.—

(1) IN GENERAL.—An invention shall be the exclusive property of the United States if it is made in the performance of any work under any contract of the Administration, and the Administrator determines that—

(A) the person who made the invention was employed or assigned to perform research, development, or exploration work and the invention is related to the work the person was employed or assigned to perform, or was within the scope of the person’s employment duties, whether or not it was made during working hours, or with a contribution by the Government of the use of Government facilities, equipment, materials, allocated funds, information proprietary to the Government, or services of Government employees during working hours; or

(B) the person who made the invention was not employed or assigned to perform research, development, or exploration work, but the invention is nevertheless related to the contract, or to the work or duties the person was employed or assigned to perform, and was made during working hours, or with a contribution from the Government of the sort referred to in subparagraph (A).

(2) PATENT TO UNITED STATES.—If an invention is the exclusive property of the United States under paragraph (1), and if such invention is patentable, a patent therefor shall be issued to the United States upon application made by the Administrator, unless the Administrator waives all or any part of the rights of the United States to such invention in conformity with the provisions of subsection (g).

(c) CONTRACT PROVISIONS FOR FURNISHING REPORTS OF INVENTIONS, DISCOVERIES, IMPROVEMENTS, OR INNOVATIONS.—Each contract entered into by the Administrator with any party for the performance of any work shall contain effective provisions under which the party shall furnish promptly to the Administrator a written report containing full and complete technical information concerning any invention, discovery, improvement, or innovation which may be made in the performance of any such work.

1 (d) PATENT APPLICATION.—No patent may be issued to any applicant
2 other than the Administrator for any invention which appears to the Under
3 Secretary of Commerce for Intellectual Property and Director of the United
4 States Patent and Trademark Office (hereafter in this section referred to
5 as the “Director”) to have significant utility in the conduct of aeronautical
6 and space activities unless the applicant files with the Director, with the ap-
7 plication or within 30 days after request therefor by the Director, a written
8 statement executed under oath setting forth the full facts concerning the
9 circumstances under which the invention was made and stating the relation-
10 ship (if any) of the invention to the performance of any work under any
11 contract of the Administration. Copies of each such statement and the appli-
12 cation to which it relates shall be transmitted forthwith by the Director to
13 the Administrator.

14 (e) ISSUANCE OF PATENT TO APPLICANT.—Upon any application as to
15 which any such statement has been transmitted to the Administrator, the
16 Director may, if the invention is patentable, issue a patent to the applicant
17 unless the Administrator, within 90 days after receipt of the application and
18 statement, requests that the patent be issued to the Administrator on behalf
19 of the United States. If, within such time, the Administrator files such a
20 request with the Director, the Director shall transmit notice thereof to the
21 applicant, and shall issue such patent to the Administrator unless the appli-
22 cant within 30 days after receipt of the notice requests a hearing before the
23 Board of Patent Appeals and Interferences on the question whether the Ad-
24 ministrator is entitled under this section to receive the patent. The Board
25 may hear and determine, in accordance with rules and procedures estab-
26 lished for interference cases, the question so presented, and its determina-
27 tion shall be subject to appeal by the applicant or by the Administrator to
28 the United States Court of Appeals for the Federal Circuit in accordance
29 with procedures governing appeals from decisions of the Board of Patent
30 Appeals and Interferences in other proceedings.

31 (f) SUBSEQUENT TRANSFER OF PATENT IN CASE OF FALSE REPRESENTA-
32 TIONS.—Whenever a patent has been issued to an applicant in conformity
33 with subsection (e), and the Administrator thereafter has reason to believe
34 that the statement filed by the applicant in connection with the patent con-
35 tained a false representation of a material fact, the Administrator, within
36 5 years after the date of issuance of the patent, may file with the Director
37 a request for the transfer to the Administrator of title to the patent on the
38 records of the Director. Notice of any such request shall be transmitted by
39 the Director to the owner of record of the patent, and title to the patent
40 shall be so transferred to the Administrator unless, within 30 days after re-
41 ceipt of notice, the owner of record requests a hearing before the Board of

1 Patent Appeals and Interferences on the question whether any such false
 2 representation was contained in the statement filed in connection with the
 3 patent. The question shall be heard and determined, and the determination
 4 shall be subject to review, in the manner prescribed by subsection (e) for
 5 questions arising thereunder. A request made by the Administrator under
 6 this subsection for the transfer of title to a patent, and prosecution for the
 7 violation of any criminal statute, shall not be barred by the failure of the
 8 Administrator to make a request under subsection (e) for the issuance of
 9 the patent to the Administrator, or by any notice previously given by the
 10 Administrator stating that the Administrator had no objection to the
 11 issuance of the patent to the applicant.

12 (g) WAIVER OF RIGHTS TO INVENTIONS.—Under such regulations in con-
 13 formity with this subsection as the Administrator shall prescribe, the Ad-
 14 ministrator may waive all or any part of the rights of the United States
 15 under this section with respect to any invention or class of inventions made
 16 or which may be made by any person or class of persons in the performance
 17 of any work required by any contract of the Administration if the Adminis-
 18 trator determines that the interests of the United States will be served
 19 thereby. Any such waiver may be made upon such terms and under such
 20 conditions as the Administrator shall determine to be required for the pro-
 21 tection of the interests of the United States. Each such waiver made with
 22 respect to any invention shall be subject to the reservation by the Adminis-
 23 trator of an irrevocable, nonexclusive, nontransferable, royalty-free license
 24 for the practice of such invention throughout the world by or on behalf of
 25 the United States or any foreign government pursuant to any treaty or
 26 agreement with the United States. Each proposal for any waiver under this
 27 subsection shall be referred to an Inventions and Contributions Board which
 28 shall be established by the Administrator within the Administration. Such
 29 Board shall accord to each interested party an opportunity for hearing, and
 30 shall transmit to the Administrator its findings of fact with respect to such
 31 proposal and its recommendations for action to be taken with respect there-
 32 to.

33 (h) PROTECTION OF TITLE.—The Administrator is authorized to take all
 34 suitable and necessary steps to protect any invention or discovery to which
 35 the Administrator has title, and to require contractors or persons who retain
 36 title to inventions or discoveries under this section to protect the inventions
 37 or discoveries to which the Administration has or may acquire a license of
 38 use.

39 (i) ADMINISTRATION AS DEFENSE AGENCY.—The Administration shall be
 40 considered a defense agency of the United States for the purpose of chapter
 41 17 of title 35.

(j) OBJECTS INTENDED FOR LAUNCH, LAUNCHED, OR ASSEMBLED IN OUTER SPACE.—Any object intended for launch, launched, or assembled in outer space shall be considered a vehicle for the purpose of section 272 of title 35.

(k) USE OR MANUFACTURE OF PATENTED INVENTIONS INCORPORATED IN SPACE VEHICLES LAUNCHED FOR PERSONS OTHER THAN UNITED STATES.—The use or manufacture of any patented invention incorporated in a space vehicle launched by the United States Government for a person other than the United States shall not be considered to be a use or manufacture by or for the United States within the meaning of section 1498(a) of title 28, unless the Administration gives an express authorization or consent for such use or manufacture.

§ 336. Contributions awards

(a) APPLICATIONS.—Subject to the provisions of this section, the Administrator is authorized, on the Administrator's own initiative or on application of any person, to make a monetary award, in an amount and on terms the Administrator determines to be warranted, to any person (as defined by section 335(a) of this title) for any scientific or technical contribution to the Administration which is determined by the Administrator to have significant value in the conduct of aeronautical and space activities. Each application made for such an award shall be referred to the Inventions and Contributions Board established under section 335 of this title. Such Board shall accord to each applicant an opportunity for hearing on the application, and shall transmit to the Administrator its recommendation as to the terms of the award, if any, to be made to the applicant for the contribution. In determining the terms and conditions of an award the Administrator shall take into account—

(1) the value of the contribution to the United States;

(2) the aggregate amount of any sums which have been expended by the applicant for the development of the contribution;

(3) the amount of any compensation (other than salary received for services rendered as an officer or employee of the Government) previously received by the applicant for or on account of the use of the contribution by the United States; and

(4) any other factors the Administrator determines to be material.

(b) APPORTIONMENT OF AWARDS.—If more than one applicant under subsection (a) claims an interest in the same contribution, the Administrator shall ascertain and determine the respective interests of the applicants, and shall apportion any award to be made among the applicants in amounts the Administrator determines to be equitable.

(c) SURRENDER OF OTHER CLAIMS.—No award may be made under subsection (a) unless the applicant surrenders, by means the Administrator determines to be effective, all claims that the applicant may have to receive any compensation (other than the award made under this section) for the use of the contribution or any element thereof at any time by or on behalf of the United States, or by or on behalf of any foreign government pursuant to a treaty or agreement with the United States, within the United States or at any other place.

(d) REPORT AND WAITING PERIOD.—No award may be made under subsection (a) in an amount exceeding \$100,000 unless the Administrator transmits to the appropriate committees of Congress a full and complete report concerning the amount and terms of, and the basis for, the proposed award, and a period of 30 calendar days of regular session of Congress expires after receipt of the report by the committees.

§ 337. Malpractice and negligence suits against United States

(a) EXCLUSIVE REMEDY.—The remedy against the United States provided by sections 1346(b) and 2672 of title 28, for damages for personal injury, including death, caused by the negligent or wrongful act or omission of any physician, dentist, nurse, pharmacist, or paramedical or other supporting personnel (including medical and dental technicians, nursing assistants, and therapists) of the Administration in the performance of medical, dental, or related health care functions (including clinical studies and investigations) while acting within the scope of such person's duties or employment therein or therefor shall be exclusive of any other civil action or proceeding by reason of the same subject matter against such person (or the estate of such person) whose act or omission gave rise to the action or proceeding.

(b) ATTORNEY GENERAL TO DEFEND ANY CIVIL ACTION OR PROCEEDING FOR MALPRACTICE OR NEGLIGENCE.—The Attorney General shall defend any civil action or proceeding brought in any court against any person referred to in subsection (a) (or the estate of such person) for any such injury. Any such person against whom such civil action or proceeding is brought shall deliver within such time after date of service or knowledge of service as determined by the Attorney General, all process served upon such person or an attested true copy thereof to such person's immediate superior or to whomever was designated by the Administrator to receive such papers. Such person shall promptly furnish copies of the pleading and process therein to the United States Attorney for the district embracing the place wherein the proceeding is brought, to the Attorney General, and to the Administrator.

1 (c) REMOVAL OF ACTIONS.—Upon a certification by the Attorney General
 2 that any person described in subsection (a) was acting in the scope of such
 3 person's duties or employment at the time of the incident out of which the
 4 suit arose, any such civil action or proceeding commenced in a State court
 5 shall be removed without bond at any time before trial by the Attorney Gen-
 6 eral to the district court of the United States of the district and division
 7 embracing the place wherein it is pending and the proceeding deemed a tort
 8 action brought against the United States under the provisions of title 28,
 9 and all references thereto. Should a district court of the United States de-
 10 termine, on a hearing on a motion to remand held before a trial on the mer-
 11 its, that the case so removed is one in which a remedy by suit within the
 12 meaning of subsection (a) is not available against the United States, the
 13 case shall be remanded to the State court.

14 (d) COMPROMISE OR SETTLEMENT OF CLAIMS.—The Attorney General
 15 may compromise or settle any claim asserted in such civil action or pro-
 16 ceeding in the manner provided in section 2677 of title 28, and with the
 17 same effect.

18 (e) APPLICABILITY OF OTHER PROVISIONS OF LAW.—For purposes of
 19 this section, the provisions of section 2680(h) of title 28 shall not apply to
 20 any cause of action arising out of a negligent or wrongful act or omission
 21 in the performance of medical, dental, or related health care functions (in-
 22 cluding clinical studies and investigations).

23 (f) LIABILITY INSURANCE FOR PERSONS ASSIGNED TO FOREIGN COUN-
 24 TRIES OR NON-FEDERAL AGENCIES.—The Administrator or the Adminis-
 25 trator's designee may, to the extent that the Administrator or the designee
 26 deems appropriate, hold harmless or provide liability insurance for any per-
 27 son described in subsection (a) for damages for personal injury, including
 28 death, caused by such person's negligent or wrongful act or omission in the
 29 performance of medical, dental, or related health care functions (including
 30 clinical studies and investigations) while acting within the scope of such per-
 31 son's duties if such person is assigned to a foreign country or detailed for
 32 service with other than a Federal department, agency, or instrumentality or
 33 if the circumstances are such as are likely to preclude the remedies of third
 34 persons against the United States described in section 2679(b) of title 28,
 35 for such damage or injury.

36 **§ 338. Insurance and indemnification**

37 (a) DEFINITIONS.—In this section:

38 (1) SPACE VEHICLE.—The term "space vehicle" means an object in-
 39 tended for launch, launched, or assembled in outer space, including the
 40 space shuttle and other components of a space transportation system,
 41 together with related equipment, devices, components, and parts.

1 (2) THIRD PARTY.—The term “third party” means any person who
2 may institute a claim against a user for death, bodily injury, or loss
3 of or damage to property.

4 (3) USER.—The term “user” includes anyone who enters into an
5 agreement with the Administration for use of all or a portion of a space
6 vehicle, who owns or provides property to be flown on a space vehicle,
7 or who employs a person to be flown on a space vehicle.

8 (b) AUTHORIZATION.—The Administration is authorized on such terms
9 and to the extent it may deem appropriate to provide liability insurance for
10 any user of a space vehicle to compensate all or a portion of claims by third
11 parties for death, bodily injury, or loss of or damage to property resulting
12 from activities carried on in connection with the launch, operations, or re-
13 covery of the space vehicle. Appropriations available to the Administration
14 may be used to acquire such insurance, but such appropriations shall be re-
15 imbursed to the maximum extent practicable by the users under reimburse-
16 ment policies established pursuant to section 313 of this title.

17 (c) INDEMNIFICATION.—Under such regulations in conformity with this
18 section as the Administrator shall prescribe taking into account the avail-
19 ability, cost, and terms of liability insurance, any agreement between the
20 Administration and a user of a space vehicle may provide that the United
21 States will indemnify the user against claims (including reasonable expenses
22 of litigation or settlement) by third parties for death, bodily injury, or loss
23 of or damage to property resulting from activities carried on in connection
24 with the launch, operations, or recovery of the space vehicle, but only to the
25 extent that such claims are not compensated by liability insurance of the
26 user. Such indemnification may be limited to claims resulting from other
27 than the actual negligence or willful misconduct of the user.

28 (d) TERMS OF INDEMNIFICATION AGREEMENT.—An agreement made
29 under subsection (c) that provides indemnification must also provide for—

30 (1) notice to the United States of any claim or suit against the user
31 for the death, bodily injury, or loss of or damage to the property; and

32 (2) control of or assistance in the defense by the United States, at
33 its election, of that suit or claim.

34 (e) CERTIFICATION OF JUST AND REASONABLE AMOUNT.—No payment
35 may be made under subsection (c) unless the Administrator or the Adminis-
36 trator’s designee certifies that the amount is just and reasonable.

37 (f) PAYMENTS.—Upon the approval by the Administrator, payments
38 under subsection (c) may be made, at the Administrator’s election, either
39 from funds available for research and development not otherwise obligated
40 or from funds appropriated for such payments.

1 **§ 339. Insurance for experimental aerospace vehicles**

2 (a) DEFINITIONS.—In this section:

3 (1) COOPERATING PARTY.—The term “cooperating party” means
4 any person who enters into an agreement with the Administration for
5 the performance of cooperative scientific, aeronautical, or space activi-
6 ties to carry out the purposes of this chapter.

7 (2) DEVELOPER.—The term “developer” means a United States per-
8 son (other than a natural person) who—

9 (A) is a party to an agreement with the Administration for the
10 purpose of developing new technology for an experimental aero-
11 space vehicle;

12 (B) owns or provides property to be flown or situated on that
13 vehicle; or

14 (C) employs a natural person to be flown on that vehicle.

15 (3) EXPERIMENTAL AEROSPACE VEHICLE.—The term “experimental
16 aerospace vehicle” means an object intended to be flown in, or launched
17 into, orbital or suborbital flight for the purpose of demonstrating tech-
18 nologies necessary for a reusable launch vehicle, developed under an
19 agreement between the Administration and a developer.

20 (4) RELATED ENTITY.—The term “related entity” includes a con-
21 tractor or subcontractor at any tier, a supplier, a grantee, and an in-
22 vestigator or detailee.

23 (b) IN GENERAL.—The Administrator may provide liability insurance for,
24 or indemnification to, the developer of an experimental aerospace vehicle de-
25 veloped or used in execution of an agreement between the Administration
26 and the developer.

27 (c) TERMS AND CONDITIONS.—

28 (1) IN GENERAL.—Except as otherwise provided in this section, the
29 insurance and indemnification provided by the Administration under
30 subsection (b) to a developer shall be provided on the same terms and
31 conditions as insurance and indemnification is provided by the Admin-
32 istration under section 338 of this title to the user of a space vehicle.

33 (2) INSURANCE.—

34 (A) IN GENERAL.—A developer shall obtain liability insurance
35 or demonstrate financial responsibility in amounts to compensate
36 for the maximum probable loss from claims by—

37 (i) a third party for death, bodily injury, or property dam-
38 age, or loss resulting from an activity carried out in connec-
39 tion with the development or use of an experimental aero-
40 space vehicle; and

(ii) the United States Government for damage or loss to Government property resulting from such an activity.

(B) MAXIMUM REQUIRED.—The Administrator shall determine the amount of insurance required, but, except as provided in subparagraph (C), that amount shall not be greater than the amount required under section 70112(a)(3) of title 49 for a launch. The Administrator shall publish notice of the Administrator's determination and the applicable amount or amounts in the Federal Register within 10 days after making the determination.

(C) INCREASE IN DOLLAR AMOUNTS.—The Administrator may increase the dollar amounts set forth in section 70112(a)(3)(A) of title 49 for the purpose of applying that section under this section to a developer after consultation with the Comptroller General and such experts and consultants as may be appropriate, and after publishing notice of the increase in the Federal Register not less than 180 days before the increase goes into effect. The Administrator shall make available for public inspection, not later than the date of publication of such notice, a complete record of any correspondence received by the Administration, and a transcript of any meetings in which the Administration participated, regarding the proposed increase.

(D) SAFETY REVIEW REQUIRED BEFORE ADMINISTRATOR PROVIDES INSURANCE.—The Administrator may not provide liability insurance or indemnification under subsection (b) unless the developer establishes to the satisfaction of the Administrator that appropriate safety procedures and practices are being followed in the development of the experimental aerospace vehicle.

(3) NO INDEMNIFICATION WITHOUT CROSS-WAIVER.—Notwithstanding subsection (b), the Administrator may not indemnify a developer of an experimental aerospace vehicle under this section unless there is an agreement between the Administration and the developer described in subsection (d).

(4) APPLICATION OF CERTAIN PROCEDURES.—If the Administrator requests additional appropriations to make payments under this section, like the payments that may be made under section 338(c) of this title, then the request for those appropriations shall be made in accordance with the procedures established by subsections (d) and (e) of section 70113 of title 49.

(d) CROSS-WAIVERS.—

(1) ADMINISTRATOR AUTHORIZED TO WAIVE.—The Administrator, on behalf of the United States, and its departments, agencies, and in-

1 instrumentalities, may reciprocally waive claims with a developer or co-
 2 operating party and with the related entities of that developer or co-
 3 operating party under which each party to the waiver agrees to be re-
 4 sponsible, and agrees to ensure that its own related entities are respon-
 5 sible, for damage or loss to its property for which it is responsible, or
 6 for losses resulting from any injury or death sustained by its own em-
 7 ployees or agents, as a result of activities connected to the agreement
 8 or use of the experimental aerospace vehicle.

9 (2) LIMITATIONS.—

10 (A) CLAIMS.—A reciprocal waiver under paragraph (1) may not
 11 preclude a claim by any natural person (including a natural person
 12 who is an employee of the United States, the developer, the co-
 13 operating party, or their respective subcontractors) or that natural
 14 person's estate, survivors, or subrogees for injury or death, except
 15 with respect to a subrogee that is a party to the waiver or has
 16 otherwise agreed to be bound by the terms of the waiver.

17 (B) LIABILITY FOR NEGLIGENCE.—A reciprocal waiver under
 18 paragraph (1) may not absolve any party of liability to any nat-
 19 ural person (including a natural person who is an employee of the
 20 United States, the developer, the cooperating party, or their re-
 21 spective subcontractors) or such a natural person's estate, sur-
 22 vivors, or subrogees for negligence, except with respect to a
 23 subrogee that is a party to the waiver or has otherwise agreed to
 24 be bound by the terms of the waiver.

25 (C) INDEMNIFICATION FOR DAMAGES.—A reciprocal waiver
 26 under paragraph (1) may not be used as the basis of a claim by
 27 the Administration, or the developer or cooperating party, for in-
 28 demnification against the other for damages paid to a natural per-
 29 son, or that natural person's estate, survivors, or subrogees, for
 30 injury or death sustained by that natural person as a result of ac-
 31 tivities connected to the agreement or use of the experimental
 32 aerospace vehicle.

33 (D) WILLFUL MISCONDUCT.—A reciprocal waiver under para-
 34 graph (1) may not relieve the United States, the developer, the co-
 35 operating party, or the related entities of the developer or cooper-
 36 ating party, of liability for damage or loss resulting from willful
 37 misconduct.

38 (3) EFFECT ON PREVIOUS WAIVERS.—This subsection applies to any
 39 waiver of claims entered into by the Administration without regard to
 40 the date on which the Administration entered into the waiver.

41 (e) RELATIONSHIP TO OTHER LAWS.—

1 (1) SECTION 338.—This section does not apply to any object, trans-
 2 action, or operation to which section 338 of this title applies.

3 (2) CHAPTER 701 OF TITLE 49.—The Administrator may not provide
 4 indemnification to a developer under this section for launches subject
 5 to license under section 70117(g)(1) of title 49.

6 (f) TERMINATION.—

7 (1) IN GENERAL.—The provisions of this section shall terminate on
 8 December 31, 2002, except that the Administrator may extend the ter-
 9 mination date to a date not later than September 30, 2005, if the Ad-
 10 ministrator determines that such extension is in the interests of the
 11 United States.

12 (2) EFFECT OF TERMINATION ON AGREEMENT.—The termination of
 13 this section shall not terminate or otherwise affect any cross-waiver
 14 agreement, insurance agreement, indemnification agreement, or other
 15 agreement entered into under this section, except as may be provided
 16 in that agreement.

17 § 340. Appropriations

18 (a) AUTHORIZATION.—

19 (1) IN GENERAL.—There are authorized to be appropriated such
 20 sums as may be necessary to carry out this chapter, except that noth-
 21 ing in this chapter shall authorize the appropriation of any amount
 22 for—

23 (A) the acquisition or condemnation of any real property; or

24 (B) any other item of a capital nature (such as plant or facility
 25 acquisition, construction, or expansion) which exceeds \$250,000.

26 (2) AVAILABILITY.—Sums appropriated pursuant to this subsection
 27 for the construction of facilities, or for research and development activi-
 28 ties, shall remain available until expended.

29 (b) USE OF FUNDS FOR EMERGENCY REPAIRS OF EXISTING FACILI-
 30 TIES.—Any funds appropriated for the construction of facilities may be used
 31 for emergency repairs of existing facilities when such existing facilities are
 32 made inoperative by major breakdown, accident, or other circumstances and
 33 such repairs are deemed by the Administrator to be of greater urgency than
 34 the construction of new facilities.

35 (c) TERMINATION.—Notwithstanding any other provision of law, the au-
 36 thorization of any appropriation to the Administration shall expire (unless
 37 an earlier expiration is specifically provided) at the close of the third fiscal
 38 year following the fiscal year in which the authorization was enacted, to the
 39 extent that such appropriation has not theretofore actually been made.

1 **§ 341. Misuse of agency name and initials**

2 (a) IN GENERAL.—No person (as defined by section 335(a) of this title)
3 may knowingly use the words “National Aeronautics and Space Administra-
4 tion” or the letters “NASA”, or any combination, variation, or colorable
5 imitation of those words or letters either alone or in combination with other
6 words or letters—

7 (1) as a firm or business name in a manner reasonably calculated
8 to convey the impression that the firm or business has some connection
9 with, endorsement of, or authorization from, the Administration which
10 does not, in fact, exist; or

11 (2) in connection with any product or service being offered or made
12 available to the public in a manner reasonably calculated to convey the
13 impression that the product or service has the authorization, support,
14 sponsorship, or endorsement of, or the development, use, or manufac-
15 ture by or on behalf of the Administration which does not, in fact,
16 exist.

17 (b) CIVIL PROCEEDING TO ENJOIN.—Whenever it appears to the Attor-
18 ney General that any person is engaged in an act or practice which con-
19 stitutes or will constitute conduct prohibited by subsection (a), the Attorney
20 General may initiate a civil proceeding in a district court of the United
21 States to enjoin such act or practice.

22 **§ 342. Contracts regarding expendable launch vehicles**

23 (a) COMMITMENTS BEYOND AVAILABLE APPROPRIATIONS.—The Admin-
24 istrator may enter into contracts for expendable launch vehicle services that
25 are for periods in excess of the period for which funds are otherwise avail-
26 able for obligation, provide for the payment for contingent liability which
27 may accrue in excess of available appropriations in the event the Federal
28 Government for its convenience terminates such contracts, and provide for
29 advance payments reasonably related to launch vehicle and related equip-
30 ment, fabrication, and acquisition costs, if any such contract limits the
31 amount of the payments that the Government is allowed to make under
32 such contract to amounts provided in advance in appropriation Acts. Such
33 contracts may be limited to sources within the United States when the Ad-
34 ministrator determines that such limitation is in the public interest.

35 (b) TERMINATION IF FUNDS NOT AVAILABLE.—If funds are not available
36 to continue any such contract, the contract shall be terminated for the con-
37 venience of the Government, and the costs of such contract shall be paid
38 from appropriations originally available for performance of the contract,
39 from other unobligated appropriations currently available for the procure-
40 ment of launch services, or from funds appropriated for such payments.

1 **§ 343. Full cost appropriations account structure**

2 (a) DESIGNATION OF ACCOUNTS FOR APPROPRIATIONS.—Appropriations
3 for the Administration shall be made in 3 accounts, “Exploration capabili-
4 ties”, “Science, aeronautics and exploration”, and an account for amounts
5 appropriated for the necessary expenses of the Office of Inspector General.
6 Appropriations shall remain available for 2 fiscal years. Each account shall
7 include the planned full costs of the Administration’s related activities.

8 (b) TRANSFERS AMONG ACCOUNTS.—To ensure the safe, timely, and suc-
9 cessful accomplishment of Administration missions, the Administration may
10 transfer among accounts as necessary, amounts for—

- 11 (1) Federal salaries and benefits;
- 12 (2) training, travel, and awards;
- 13 (3) facility and related costs;
- 14 (4) information technology services;
- 15 (5) publishing services;
- 16 (6) science, engineering, fabricating, and testing services; and
- 17 (7) other administrative services.

18 (c) TRANSFER OF UNEXPIRED BALANCES.—The unexpired balances of
19 prior appropriations to the Administration for activities authorized under
20 this chapter may be transferred to the new account established for such ac-
21 tivity in subsection (a). Balances so transferred may be merged with funds
22 in the newly established account and thereafter may be accounted for as one
23 fund under the same terms and conditions.

24 **§ 344. Enhanced-use lease of real property demonstration**

25 (a) IN GENERAL.—Notwithstanding any other provision of law, the Ad-
26 ministrator may enter into a lease under this section with any person or
27 entity (including another department or agency of the Federal Government
28 or an entity of a State or local government) with regard to any real property
29 under the jurisdiction of the Administrator at no more than 2 Administra-
30 tion centers.

31 (b) CONSIDERATION.—

32 (1) AMOUNT.—A person or entity entering into a lease under this
33 section shall provide consideration for the lease at fair market value as
34 determined by the Administrator, except that in the case of a lease to
35 another department or agency of the Federal Government, that depart-
36 ment or agency shall provide consideration for the lease equal to the
37 full costs to the Administration in connection with the lease.

38 (2) FORM.—Consideration under this subsection may take one or a
39 combination of the following forms:

- 40 (A) The payment of cash.

(B) The maintenance, construction, modification, or improvement of facilities on real property under the jurisdiction of the Administrator.

(C) The provision of services to the Administration, including launch services and payload processing services.

(D) The use by the Administration of facilities on the property.

(3) CASH CONSIDERATION.—

(A) UTILIZATION.—The Administrator may utilize amounts of cash consideration received under this subsection for a lease entered into under this section to cover the full costs to the Administration in connection with the lease. These funds shall remain available until expended.

(B) AMOUNTS NOT UTILIZED.—Any amounts of cash consideration received under this subsection that are not utilized in accordance with subparagraph (A) shall be deposited in a capital asset account to be established by the Administrator, shall be available for maintenance, capital revitalization, and improvements of the real property assets of the centers selected for this demonstration program, and shall remain available until expended.

(c) ADDITIONAL TERMS AND CONDITIONS.—The Administrator may require such terms and conditions in connection with a lease under this section as the Administrator considers appropriate to protect the interests of the United States.

(d) RELATIONSHIP TO OTHER LEASE AUTHORITY.—The authority under this section to lease property of the Administration is in addition to any other authority to lease property of the Administration under law.

(e) LEASE RESTRICTIONS.—The Administration is not authorized to lease back property under this section during the term of the out-lease or enter into other contracts with the lessee respecting the property.

(f) PLAN AND REPORTING REQUIREMENTS.—At least 15 days prior to the Administrator entering into the first lease under this section, the Administrator shall submit a plan to Congress on the Administration's proposed implementation of this demonstration. The Administrator shall submit an annual report by January 31 of each year regarding the status of the demonstration.

SUBCHAPTER IV—UPPER ATMOSPHERE RESEARCH

§ 361. Congressional declaration of purpose and policy

(a) PURPOSE.—The purpose of this subchapter is to authorize and direct the Administration to develop and carry out a comprehensive program of research, technology, and monitoring of the phenomena of the upper atmos-

phere so as to provide for an understanding of and to maintain the chemical and physical integrity of the Earth's upper atmosphere.

(b) **POLICY.**—Congress declares that it is the policy of the United States to undertake an immediate and appropriate research, technology, and monitoring program that will provide for understanding the physics and chemistry of the Earth's upper atmosphere.

§ 362. Definition of upper atmosphere

In this subchapter, the term “upper atmosphere” means that portion of the Earth's sensible atmosphere above the troposphere.

§ 363. Program authorized

(a) **IN GENERAL.**—In order to carry out the purposes of this subchapter, the Administration, in cooperation with other Federal agencies, shall initiate and carry out a program of research, technology, monitoring, and other appropriate activities directed to understand the physics and chemistry of the upper atmosphere.

(b) **ACTIVITIES.**—In carrying out the provisions of this subchapter, the Administration shall—

(1) arrange for participation by the scientific and engineering community, of both the Nation's industrial organizations and institutions of higher education, in planning and carrying out appropriate research, in developing necessary technology, and in making necessary observations and measurements;

(2) provide, by way of grant, contract, scholarships, or other arrangements, to the maximum extent practicable and consistent with other laws, for the widest practicable and appropriate participation of the scientific and engineering community in the program authorized by this subchapter; and

(3) make all results of the program authorized by this subchapter available to the appropriate regulatory agencies and provide for the widest practicable dissemination of such results.

§ 364. International cooperation

In carrying out the provisions of this subchapter, the Administration, subject to the direction of the President and after consultation with the Secretary of State, shall make every effort to enlist the support and cooperation of appropriate scientists and engineers of other countries and international organizations.

CHAPTER 5—ADJUNCT NATIONAL SPACE PROGRAM PROVISIONS

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SUBCHAPTER I—APPROPRIATIONS AND FUNDS

§ 501. Prior authorization of appropriations required

Notwithstanding the provisions of any other law, no appropriation may be made to the Administration unless previously authorized by legislation enacted by Congress.

§ 502. Working capital fund

(a) ESTABLISHMENT.—There is hereby established in the United States Treasury an Administration working capital fund.

(b) AVAILABILITY OF AMOUNTS.—

(1) IN GENERAL.—Amounts in the fund are available for financing activities, services, equipment, information, and facilities as authorized by law to be provided—

(A) within the Administration;

(B) to other agencies or instrumentalities of the United States;

1 (C) to any State, Territory, or possession or political subdivision
2 thereof;

3 (D) to other public or private agencies; or

4 (E) to any person, firm, association, corporation, or educational
5 institution on a reimbursable basis.

6 (2) CAPITAL REPAIRS.—The fund shall also be available for the pur-
7 pose of funding capital repairs, renovations, rehabilitation,
8 sustainment, demolition, or replacement of Administration real prop-
9 erty, on a reimbursable basis within the Administration.

10 (3) NO FISCAL YEAR LIMITATION.—Amounts in the fund are avail-
11 able without regard to fiscal year limitation.

12 (c) CONTENTS.—The capital of the fund consists of—

13 (1) amounts appropriated to the fund;

14 (2) the reasonable value of stocks of supplies, equipment, and other
15 assets and inventories on order that the Administrator transfers to the
16 fund, less the related liabilities and unpaid obligations; and

17 (3) payments received for loss or damage to property of the fund.

18 (d) REIMBURSEMENT.—The fund shall be reimbursed, in advance, for
19 supplies and services at rates that will approximate the expenses of oper-
20 ation, such as the accrual of annual leave, depreciation of plant, property,
21 and equipment, and overhead.

22 SUBCHAPTER II—CONTRACT AND LEASE AUTHORITY

23 § 511. Guaranteed customer base

24 No amount appropriated to the Administration may be used to fund
25 grants, contracts, or other agreements with an expected duration of more
26 than one year, when a primary effect of the grant, contract, or agreement
27 is to provide a guaranteed customer base for or establish an anchor tenancy
28 in new commercial space hardware or services unless an appropriations Act
29 specifies the new commercial space hardware or services to be developed or
30 used, or the grant, contract, or agreement is otherwise identified in such
31 Act.

32 § 512. Quality assurance personnel

33 (a) EXCLUSION OF ADMINISTRATION PERSONNEL.—A person providing
34 articles to the Administration under a contract entered into after December
35 9, 1991, may not exclude Administration quality assurance personnel from
36 work sites except as provided in a contract provision that has been sub-
37 mitted to Congress as provided in subsection (b).

38 (b) CONTRACT PROVISIONS.—The Administration shall not enter into any
39 contract which permits the exclusion of Administration quality assurance
40 personnel from work sites unless the Administrator has submitted a copy

1 of the provision permitting such exclusion to Congress at least 60 days be-
 2 fore entering into the contract.

3 **§ 513. Tracking and data relay satellite services**

4 (a) CONTRACTS.—The Administration is authorized, when so provided in
 5 an appropriation Act, to enter into and to maintain a contract for tracking
 6 and data relay satellite services. Such services shall be furnished to the Ad-
 7 ministration in accordance with applicable authorization and appropriations
 8 Acts. The Government shall incur no costs under such contract prior to the
 9 furnishing of such services except that the contract may provide for the pay-
 10 ment for contingent liability of the Government which may accrue in the
 11 event the Government should decide for its convenience to terminate the
 12 contract before the end of the period of the contract. Facilities which may
 13 be required in the performance of the contract may be constructed on Gov-
 14 ernment-owned lands if there is included in the contract a provision under
 15 which the Government may acquire title to the facilities, under terms and
 16 conditions agreed upon in the contract, upon termination of the contract.

17 (b) REPORTS TO CONGRESS.—The Administrator shall in January of
 18 each year report to the Committee on Science and the Committee on Appro-
 19 priations of the House of Representatives and the Committee on Commerce,
 20 Science, and Transportation and the Committee on Appropriations of the
 21 Senate the projected aggregate contingent liability of the Government under
 22 termination provisions of any contract authorized in this section through the
 23 next fiscal year. The authority of the Administration to enter into and to
 24 maintain the contract authorized hereunder shall remain in effect unless re-
 25 pealed by legislation enacted by Congress.

26 **§ 514. Award of contracts to small businesses and disadvan-**
 27 **tagged individuals**

28 The Administrator shall annually establish a goal of at least 8 percent
 29 of the total value of prime and subcontracts awarded in support of author-
 30 ized programs, including the space station by the time operational status
 31 is obtained, which funds will be made available to small business concerns
 32 or other organizations owned or controlled by socially and economically dis-
 33 advantaged individuals (within the meaning of paragraphs (5) and (6) of
 34 section 8(a) of the Small Business Act (15 U.S.C. 637(a))), including His-
 35 torically Black Colleges and Universities and minority educational institu-
 36 tions (as defined by the Secretary of Education pursuant to the General
 37 Education Provisions Act (20 U.S.C. 1221 et seq.)).

38 **§ 515. Foreign contract limitation**

39 The Administration shall not enter into any agreement or contract with
 40 a foreign government that grants the foreign government the right to re-
 41 cover profit in the event that the agreement or contract is terminated.

SUBCHAPTER III—COST EFFECTIVENESS

§ 531. Requirement for independent cost analysis

(a) DEFINITION OF PHASE B.—In this section, the term “Phase B” means the latter stages of project formulation, during which the final definition of a project is carried out and before project implementation (which includes the Design, Development, and Operations Phases) begins.

(b) REQUIREMENT.—Before any funds may be obligated for Phase B of a project that is projected to cost more than \$150,000,000 in total project costs, the Chief Financial Officer for the Administration shall conduct an independent life-cycle cost analysis of the project and shall report the results to Congress. In developing cost accounting and reporting standards for carrying out this section, the Chief Financial Officer shall, to the extent practicable and consistent with other laws, solicit the advice of experts outside of the Administration.

§ 532. Cost effectiveness calculations

(a) DEFINITION OF COMMERCIAL PROVIDER.—In this section, the term “commercial provider” has the meaning given the term in section 3 of the National Aeronautics and Space Administration Authorization Act of 2000 (Public Law 106–391, 114 Stat. 1579).

(b) IN GENERAL.—Except as otherwise required by law, in calculating the cost effectiveness of the cost of the Administration engaging in an activity as compared to a commercial provider, the Administrator shall compare the cost of the Administration engaging in the activity using full cost accounting principles with the price the commercial provider will charge for such activity.

§ 533. Use of abandoned and underutilized buildings, grounds, and facilities

(a) DEFINITION OF DEPRESSED COMMUNITIES.—In this section, the term “depressed communities” means rural and urban communities that are relatively depressed, in terms of age of housing, extent of poverty, growth of per capita income, extent of unemployment, job lag, or surplus labor.

(b) IN GENERAL.—In any case in which the Administrator considers the purchase, lease, or expansion of a facility to meet requirements of the Administration, the Administrator shall consider whether those requirements could be met by the use of one of the following:

(1) Abandoned or underutilized buildings, grounds, and facilities in depressed communities that can be converted to Administration usage at a reasonable cost, as determined by the Administrator.

(2) Any military installation that is closed or being closed, or any facility at such an installation.

(3) Any other facility or part of a facility that the Administrator determines to be—

(A) owned or leased by the United States for the use of another agency of the Federal Government; and

(B) considered by the head of the agency involved to be—

(i) excess to the needs of that agency; or

(ii) underutilized by that agency.

SUBCHAPTER IV—AWARDS

§ 541. Congressional Space Medal of Honor

(a) **AUTHORITY TO AWARD.**—The President may award, and present in the name of Congress, a medal of appropriate design, which shall be known as the Congressional Space Medal of Honor, to any astronaut who in the performance of the astronaut's duties has distinguished himself or herself by exceptionally meritorious efforts and contributions to the welfare of the Nation and of humankind.

(b) **APPROPRIATIONS.**—There is authorized to be appropriated from time to time such sums of money as may be necessary to carry out the purposes of this section.

SUBCHAPTER V—USE OF SPACE SHUTTLE OR ALTERNATIVES

§ 551. Recovery of fair value of placing Department of Defense payloads in orbit with space shuttle

Notwithstanding any other provision of law, or any interagency agreement, the Administrator shall charge such prices as are necessary to recover the fair value of placing Department of Defense payloads into orbit by means of the space shuttle.

§ 552. Payloads launched on Titan II launch vehicles

The Secretary of Defense and the Administrator will jointly determine which payloads will be launched on Titan II launch vehicles and certify by notice to Congress that such launches are cost effective as compared to launches by the space shuttle and do not diminish the efficient and effective utilization of the space shuttle capability. This section may be waived only upon certification by the Secretary of Defense that certain classified payloads must be launched on the Titan II launch vehicle as opposed to the space shuttle, for national security reasons.

§ 553. Space shuttle use policy

(a) **USE POLICY.**—

(1) **IN GENERAL.**—

(A) **POLICY.**—It shall be the policy of the United States to use the space shuttle—

(i) for purposes that require a human presence;

(ii) for purposes that require the unique capabilities of the space shuttle; or

(iii) when other compelling circumstances exist.

(B) DEFINITION OF COMPELLING CIRCUMSTANCES.—In this paragraph, the term “compelling circumstances” includes, but is not limited to, occasions when the Administrator determines, in consultation with the Secretary of Defense and the Secretary of State, that important national security or foreign policy interests would be served by a shuttle launch.

(2) USING AVAILABLE CARGO SPACE FOR SECONDARY PAYLOADS.—

The policy stated in paragraph (1) shall not preclude the use of available cargo space, on a space shuttle mission otherwise consistent with the policy described in paragraph (1), for the purpose of carrying secondary payloads (as defined by the Administrator) that do not require a human presence if such payloads are consistent with the requirements of research, development, demonstration, scientific, commercial, and educational programs authorized by the Administrator.

(b) ANNUAL REPORT.—At least annually, the Administrator shall submit to Congress a report certifying that the payloads scheduled to be launched on the space shuttle for the next 4 years are consistent with the policy set forth in subsection (a)(1). For each payload scheduled to be launched from the space shuttle that does not require a human presence, the Administrator shall, in the certified report to Congress, state the specific circumstances that justified the use of the space shuttle. If, during the period between scheduled reports to Congress, any additions are made to the list of certified payloads intended to be launched from the shuttle, the Administrator shall inform Congress of the additions and the reasons therefor within 45 days of the change.

(c) ADMINISTRATION PAYLOADS.—The report described in subsection (b) shall also include those Administration payloads designed solely to fly on the space shuttle which have begun the phase C/D of its development cycle.

§ 554. Commercial payloads on space shuttle

(a) DEFINITIONS.—In this section:

(1) LAUNCH VEHICLE.—The term “launch vehicle” means any vehicle constructed for the purpose of operating in, or placing a payload in, outer space.

(2) PAYLOAD.—The term “payload” means an object which a person undertakes to place in outer space by means of a launch vehicle, and includes subcomponents of the launch vehicle specifically designed or adapted for that object.

(b) IN GENERAL.—Commercial payloads may not be accepted for launch as primary payloads on the space shuttle unless the Administrator determines that—

- (1) the payload requires the unique capabilities of the space shuttle;
- or
- (2) launching of the payload on the space shuttle is important for either national security or foreign policy purposes.

SUBCHAPTER VI—SHUTTLE PRICING POLICY FOR COMMERCIAL AND FOREIGN USERS

§ 561. Congressional findings and declarations

Congress finds and declares that—

- (1) the Space Transportation System is a vital element of the United States space program, contributing to the United States leadership in space research, technology, and development;
- (2) the Space Transportation System is the primary space launch system for both United States national security and civil government missions;
- (3) the Space Transportation System contributes to the expansion of United States private sector investment and involvement in space and therefore should serve commercial users;
- (4) the availability of the Space Transportation System to foreign users for peaceful purposes is an important means of promoting international cooperative activities in the national interest and in maintaining access to space for activities which enhance the security and welfare of humankind;
- (5) the United States is committed to maintaining world leadership in space transportation;
- (6) making the Space Transportation System fully operational and cost effective in providing routine access to space will maximize the national economic benefits of the system; and
- (7) national goals and the objectives for the Space Transportation System can be furthered by a stable and fair pricing policy for the Space Transportation System.

§ 562. Purpose, policy, and goals

The purpose of this subchapter is to set, for commercial and foreign users, the reimbursement pricing policy for the Space Transportation System that is consistent with the findings included in section 561 of this title, encourages the full and effective use of space, and is designed to achieve the following goals:

- (1) The preservation of the role of the United States as a leader in space research, technology, and development.

1 (2) The efficient and cost effective use of the Space Transportation
2 System.

3 (3) The achievement of greatly increased commercial space activity.

4 (4) The enhancement of the international competitive position of the
5 United States.

6 **§ 563. Definition of additive cost**

7 In this subchapter, the term “additive cost” means the average direct and
8 indirect costs to the Administration of providing additional flights of the
9 Space Transportation System beyond the costs associated with those flights
10 necessary to meet the space transportation needs of the United States Gov-
11 ernment.

12 **§ 564. Duties of Administrator**

13 (a) ESTABLISHMENT AND IMPLEMENTATION OF REIMBURSEMENT RE-
14 COVERY SYSTEM.—The Administrator shall establish and implement a pric-
15 ing system to recover reimbursement in accordance with the pricing policy
16 under section 562 of this title from each commercial or foreign user of the
17 Space Transportation System, which, except as provided in subsections (c),
18 (d), and (e), shall include a base price of not less than \$74,000,000 for each
19 flight of the Space Transportation System in 1982 dollars.

20 (b) REPORTS TO CONGRESS.—Each year the Administrator shall submit
21 to the President of the Senate, the Speaker of the House of Representatives,
22 the Committee on Commerce, Science, and Transportation of the Senate,
23 and the Committee on Science of the House of Representatives a report,
24 transmitted contemporaneously with the annual budget request of the Presi-
25 dent, which shall inform Congress how the policy goals contained in section
26 562 of this title are being furthered by the shuttle price for foreign and
27 commercial users.

28 (c) REDUCTION OF BASE PRICE.—

29 (1) AUTHORITY TO REDUCE.—If at any time the Administrator finds
30 that the policy goals contained in section 562 of this title are not being
31 achieved, the Administrator shall have authority to reduce the base
32 price established in subsection (a) after 45 days following receipt by
33 the President of the Senate, the Speaker of the House, the Committee
34 on Commerce, Science, and Transportation of the Senate, and the
35 Committee on Science of the House of Representatives of a notice by
36 the Administrator containing a description of the proposed reduction
37 together with a full and complete statement of the facts and cir-
38 cumstances which necessitate such proposed reduction.

39 (2) MINIMUM PRICE.—In no case shall the minimum price estab-
40 lished under paragraph (1) be less than additive cost.

(d) LOW OR NO-COST FLIGHTS.—The Administrator may set a price lower than the price determined under subsection (a) or (c), or provide no-cost flights, for any commercial or foreign user of the Space Transportation System that is involved in research, development, or demonstration programs with the Administration.

(e) CUSTOMER INCENTIVES.—Notwithstanding the provisions of subsection (a), the Administrator shall have the authority to offer reasonable customer incentives consistent with the policy goals in section 562 of this title.

SUBCHAPTER VII—EDUCATION AND RESEARCH

§ 571. Science, Space, and Technology Education Trust Fund

There is appropriated, by transfer from funds appropriated in the Department of Housing and Urban Development—Independent Agencies Appropriations Act, 1989 (Public Law 100–404, 102 Stat. 1014), for “Construction of facilities”, the sum of \$15,000,000 to the “Science, Space, and Technology Education Trust Fund”, which is hereby established in the Treasury of the United States. The Secretary of the Treasury shall invest these funds in the United States Treasury special issue securities, and interest shall be credited to the Trust Fund on a quarterly basis. Such interest shall be available for the purpose of making grants for programs directed at improving science, space, and technology education in the United States. The Administrator, after consultation with the Director of the National Science Foundation, shall review applications made for such grants and determine the distribution of available funds on a competitive basis. Grants shall be made available to any awardee only to the extent that the awardee provides matching funds from non-Federal sources to carry out the program for which grants from this Trust Fund are made. Of the funds made available by this Trust Fund, \$250,000 shall be disbursed each calendar quarter to the Challenger Center for Space Science Education. The Administrator shall submit to Congress an annual report on the grants made pursuant to this section.

§ 572. National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund

(a) ESTABLISHMENT.—There is established in the Treasury of the United States, in tribute to the dedicated crew of the Space Shuttle Challenger, a trust fund to be known as the National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund (hereafter in this section referred to as the “Trust Fund”). The Trust Fund shall consist of amounts which may from time to time, at the discretion of the Administrator, be transferred from the National Aeronautics and Space Administration Gifts and Donations Trust Fund.

(b) INVESTMENT OF TRUST FUND.—The Administrator shall direct the Secretary of the Treasury to invest and reinvest funds in the Trust Fund in public debt securities with maturities suitable for the needs of the Trust Fund, and bearing interest at rates determined by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States of comparable maturities. Interest earned shall be credited to the Trust Fund.

(c) PURPOSE.—Income accruing from the Trust Fund principal shall be used to create the National Aeronautics and Space Administration Endeavor Teacher Fellowship Program, to the extent provided in advance in appropriation Acts. The Administrator is authorized to use such funds to award fellowships to selected United States nationals who are undergraduate students pursuing a course of study leading to certified teaching degrees in elementary education or in secondary education in mathematics, science, or technology disciplines. Awards shall be made pursuant to standards established for the fellowship program by the Administrator.

§573. Experimental Program to Stimulate Competitive Research—merit grant competition requirements

(a) DEFINITION OF ELIGIBLE STATE.—In this section, the term “eligible State” means a State designated by the Administrator as eligible to compete in the National Science Foundation’s Experimental Program to Stimulate Competitive Research.

(b) COMPETITION.—Making use of the existing infrastructure established in eligible States by the National Science Foundation, the Administrator shall conduct a merit grant competition among the eligible States in areas of research important to the mission of the Administration. With respect to a grant application by an eligible State, the Administrator shall consider—

(1) the application’s merit and relevance to the mission of the Administration;

(2) the potential for the grant to serve as a catalyst to enhance the ability of researchers in the State to become more competitive for regular Administration funding;

(3) the potential for the grant to improve the environment for science, mathematics, and engineering education in the State; and

(4) the need to ensure the maximum distribution of grants among eligible States, consistent with merit.

(c) SUPPLEMENTAL GRANTS.—The Administrator shall endeavor, where appropriate, to supplement grants made under subsection (b) with such grants for fellowships, traineeships, equipment, or instrumentation as are available.

**§574. National Aeronautics and Space Administration
Science and Technology Scholarship Program**

(a) DEFINITIONS.—In this section:

(1) COST OF ATTENDANCE.—The term “cost of attendance” has the meaning given the term in section 472 of the Higher Education Act of 1965 (20 U.S.C. 1087*ll*).

(2) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(3) PROGRAM.—The term “Program” means the National Aeronautics and Space Administration Science and Technology Scholarship Program established under this section.

(b) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—The Administrator shall establish a National Aeronautics and Space Administration Science and Technology Scholarship Program to award scholarships to individuals that is designed to recruit and prepare students for careers in the Administration.

(2) SELECTION BY COMPETITIVE PROCESS.—Individuals shall be selected to receive scholarships under this section through a competitive process primarily on the basis of academic merit, with consideration given to financial need and the goal of promoting the participation of individuals identified in section 33 or 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b).

(3) CONTRACTUAL AGREEMENT TO SERVE AS FULL-TIME EMPLOYEE.—To carry out the Program, the Administrator shall enter into contractual agreements with individuals selected under paragraph (2) under which the individuals agree to serve as full-time employees of the Administration, for the period described in subsection (g)(1), in positions needed by the Administration and for which the individuals are qualified, in exchange for receiving a scholarship.

(c) ELIGIBILITY.—In order to be eligible to participate in the Program, an individual must—

(1) be enrolled or accepted for enrollment as a full-time student at an institution of higher education, as a junior or senior undergraduate or graduate student, in an academic field or discipline described in the list made available under subsection (e);

(2) be a United States citizen or permanent resident; and

(3) at the time of the initial scholarship award, not be an employee (as defined in section 2105 of title 5).

(d) APPLICATION.—An individual seeking a scholarship under this section shall submit an application to the Administrator at such time, in such man-

ner, and containing such information, agreements, or assurances as the Administrator may require.

(e) LIST OF ACADEMIC PROGRAMS AND FIELDS OF STUDY.—The Administrator shall make publicly available a list of academic programs and fields of study for which scholarships under the Program may be utilized and shall update the list as necessary.

(f) PROVIDING SCHOLARSHIPS.—

(1) REQUIRED ACADEMIC DEGREE PROGRAM.—The Administrator may provide a scholarship under the Program for an academic year if the individual applying for the scholarship has submitted to the Administrator, as part of the application required under subsection (d), a proposed academic program leading to a degree in a program or field of study on the list made available under subsection (e).

(2) FOUR-YEAR LIMITATION.—An individual may not receive a scholarship under this section for more than 4 academic years, unless the Administrator grants a waiver.

(3) AMOUNT.—The dollar amount of a scholarship under this section for an academic year shall be determined under regulations issued by the Administrator, but shall in no case exceed the cost of attendance.

(4) USE.—A scholarship provided under this section may be expended for tuition, fees, and other authorized expenses as established by the Administrator by regulation.

(5) DIRECT PAYMENTS TO INSTITUTIONS.—The Administrator may enter into a contractual agreement with an institution of higher education under which the amounts provided for a scholarship under this section for tuition, fees, and other authorized expenses are paid directly to the institution with respect to which the scholarship is provided.

(g) PERIOD OF SERVICE.—

(1) DURATION.—The period of service for which an individual shall be obligated to serve as an employee of the Administration is, except as provided in subsection (i)(2), 24 months for each academic year for which a scholarship under this section is provided.

(2) START DATE.—

(A) IN GENERAL.—Except as provided in subparagraph (B), obligated service under paragraph (1) shall begin not later than 60 days after the individual obtains the educational degree for which the scholarship was provided.

(B) DEFERMENT.—The Administrator may defer the obligation of an individual to provide a period of service under paragraph (1) if the Administrator determines that such a deferment is appropriate. The Administrator shall prescribe the terms and conditions

1 under which a service obligation may be deferred through regula-
 2 tion.

3 (h) BREACH AND LIABILITY FOR REPAYMENT.—

4 (1) FAILURE TO COMPLETE ACADEMIC PROGRAM.—Scholarship re-
 5 cipients who fail to maintain a high level of academic standing, as de-
 6 fined by the Administrator by regulation, who are dismissed from their
 7 educational institutions for disciplinary reasons, or who voluntarily ter-
 8minate academic training before graduation from the educational pro-
 9gram for which the scholarship was awarded, shall be in breach of their
 10 contractual agreement and, in lieu of any service obligation arising
 11 under such agreement, shall be liable to the United States for repay-
 12ment within one year after the date of default of all scholarship funds
 13 paid to them and to the institution of higher education on their behalf
 14 under the agreement, except as provided in subsection (i)(2). The re-
 15 payment period may be extended by the Administrator when deter-
 16mined to be necessary, as established by regulation.

17 (2) FAILURE TO FULFILL SERVICE OBLIGATION.—

18 (A) BREACH OF CONTRACTUAL AGREEMENT.—A scholarship re-
 19 cipient who, for any reason, fails to begin or complete the recipi-
 20 ent's service obligation after completion of academic training, or
 21 fails to comply with the terms and conditions of deferment estab-
 22 lished by the Administrator pursuant to subsection (g)(2)(B), shall
 23 be in breach of the recipient's contractual agreement.

24 (B) LIABILITY TO UNITED STATES.—A recipient in breach of
 25 the recipient's contractual agreement under subparagraph (A)
 26 shall be liable to the United States for an amount equal to 3 times
 27 the sum of—

28 (i) the total amount of scholarships received by the recipi-
 29 ent under this section; plus

30 (ii) the interest on the amounts of the awards which would
 31 be payable if at the time the awards were received they were
 32 loans bearing interest at the maximum legal prevailing rate,
 33 as determined by the Treasurer of the United States.

34 (i) CANCELLATION, WAIVER, AND SUSPENSION OF OBLIGATIONS.—

35 (1) DEATH.—Any obligation of an individual incurred under the Pro-
 36 gram (or a contractual agreement thereunder) for service or payment
 37 shall be canceled upon the death of the individual.

38 (2) IMPOSSIBILITY OR EXTREME HARDSHIP.—The Administrator
 39 shall by regulation provide for the partial or total waiver or suspension
 40 of any obligation of service or payment incurred by an individual under
 41 the Program (or a contractual agreement thereunder) whenever compli-

ance by the individual is impossible or would involve extreme hardship to the individual, or if enforcement of such obligation with respect to the individual would be contrary to the best interests of the Government.

(j) APPROPRIATIONS.—

(1) AUTHORIZATION.—There is authorized to be appropriated to the Administration for the Program \$10,000,000 for each fiscal year.

(2) AVAILABILITY.—Amounts appropriated under this section shall remain available for 2 fiscal years.

(k) TEMPORARY INTERNSHIPS.—The Administrator may provide temporary internships to full-time students enrolled in an undergraduate or post-graduate program leading to an advanced degree in an aerospace-related or aviation safety-related field of endeavor.

SUBCHAPTER VIII—SAFETY

§ 581. Drug and alcohol testing

(a) FINDINGS.—Congress finds that—

(1) alcohol abuse and illegal drug use pose significant dangers to the safety and welfare of the Nation;

(2) the success of the United States civil space program is contingent upon the safe and successful development and deployment of the many varied components of that program;

(3) the greatest efforts must be expended to eliminate the abuse of alcohol and use of illegal drugs, whether on duty or off duty, by those individuals who are involved in the positions affecting safety, security, and national security;

(4) the use of alcohol and illegal drugs has been demonstrated to adversely affect the performance of individuals, and has been proven to have been a critical factor in accidents in the workplace;

(5) the testing of uniformed personnel of the Armed Forces has shown that the most effective deterrent to abuse of alcohol and use of illegal drugs is increased testing, including random testing;

(6) adequate safeguards can be implemented to ensure that testing for abuse of alcohol or use of illegal drugs is performed in a manner that protects an individual's right of privacy, ensures that no individual is harassed by being treated differently from other individuals, and ensures that no individual's reputation or career development is unduly threatened or harmed; and

(7) rehabilitation is a critical component of any testing program for abuse of alcohol or use of illegal drugs, and should be made available to individuals, as appropriate.

(b) DEFINITION OF CONTROLLED SUBSTANCE.—In this section, the term “controlled substance” means any substance under section 102(6) of the Controlled Substances Act (21 U.S.C. 802(6)) specified by the Administrator.

(c) TESTING PROGRAM.—

(1) EMPLOYEES OF ADMINISTRATION.—The Administrator shall establish a program applicable to employees of the Administration whose duties include responsibility for safety-sensitive, security, or national security functions. Such program shall provide for preemployment, reasonable suspicion, random, and post-accident testing for use, in violation of applicable law or Federal regulation, of alcohol or a controlled substance. The Administrator may also prescribe regulations, as the Administrator considers appropriate in the interest of safety, security, and national security, for the conduct of periodic recurring testing of such employees for such use in violation of applicable law or Federal regulation.

(2) EMPLOYEES OF CONTRACTORS.—The Administrator shall, in the interest of safety, security, and national security, prescribe regulations. Such regulations shall establish a program that requires Administration contractors to conduct preemployment, reasonable suspicion, random, and post-accident testing of contractor employees responsible for safety-sensitive, security, or national security functions (as determined by the Administrator) for use, in violation of applicable law or Federal regulation, of alcohol or a controlled substance. The Administrator may also prescribe regulations, as the Administrator considers appropriate in the interest of safety, security, and national security, for the conduct of periodic recurring testing of such employees for such use in violation of applicable law or Federal regulation.

(3) SUSPENSION, DISQUALIFICATION, OR DISMISSAL.—In prescribing regulations under the programs required by this subsection, the Administrator shall require, as the Administrator considers appropriate, the suspension, disqualification, or dismissal of any employee to which paragraph (1) or (2) applies, in accordance with the provisions of this section, in any instance where a test conducted and confirmed under this section indicates that such employee has used, in violation of applicable law or Federal regulation, alcohol or a controlled substance.

(d) PROHIBITION ON SERVICE.—

(1) PROHIBITION UNLESS PROGRAM OF REHABILITATION COMPLETED.—No individual who is determined by the Administrator under this section to have used, in violation of applicable law or Federal regulation, alcohol or a controlled substance after December 9, 1991, shall

1 serve as an Administration employee with responsibility for safety-sen-
 2 sitive, security, or national security functions (as determined by the
 3 Administrator), or as an Administration contractor employee with such
 4 responsibility, unless such individual has completed a program of reha-
 5 bilitation described in subsection (e).

6 (2) UNCONDITIONAL PROHIBITION.—Any such individual determined
 7 by the Administrator under this section to have used, in violation of
 8 applicable law or Federal regulation, alcohol or a controlled substance
 9 after December 9, 1991, shall not be permitted to perform the duties
 10 that the individual performed prior to the date of the determination,
 11 if the individual—

12 (A) engaged in such use while on duty;

13 (B) prior to such use had undertaken or completed a rehabilita-
 14 tion program described in subsection (e);

15 (C) following such determination refuses to undertake such a re-
 16 habilitation program; or

17 (D) following such determination fails to complete such a reha-
 18 bilitation program.

19 (e) PROGRAM FOR REHABILITATION.—

20 (1) REGULATIONS AND AVAILABILITY OF PROGRAM FOR CON-
 21 TRACTOR EMPLOYEES.—The Administrator shall prescribe regulations
 22 setting forth requirements for rehabilitation programs which at a min-
 23 imum provide for the identification and opportunity for treatment of
 24 employees referred to in subsection (c) in need of assistance in resolv-
 25 ing problems with the use, in violation of applicable law or Federal reg-
 26 ulation, of alcohol or a controlled substance. Each contractor is encour-
 27 aged to make such a program available to all of its employees in addi-
 28 tion to those employees referred to in subsection (c)(2). The Adminis-
 29 trator shall determine the circumstances under which such employees
 30 shall be required to participate in such a program. Nothing in this sub-
 31 section shall preclude any Administration contractor from establishing
 32 a program under this subsection in cooperation with any other such
 33 contractor.

34 (2) ESTABLISHMENT AND MAINTENANCE OF PROGRAM FOR ADMINIS-
 35 TRATION EMPLOYEES.—The Administrator shall establish and maintain
 36 a rehabilitation program which at a minimum provides for the identi-
 37 fication and opportunity for treatment of those employees of the Ad-
 38 ministration whose duties include responsibility for safety-sensitive, se-
 39 curity, or national security functions who are in need of assistance in
 40 resolving problems with the use of alcohol or controlled substances.

1 (f) PROCEDURES FOR TESTING.—In establishing the programs required
2 under subsection (c), the Administrator shall develop requirements which
3 shall—

4 (1) promote, to the maximum extent practicable, individual privacy
5 in the collection of specimen samples;

6 (2) with respect to laboratories and testing procedures for controlled
7 substances, incorporate the Department of Health and Human Services
8 scientific and technical guidelines dated April 11, 1988, and any subse-
9 quent amendments thereto, including mandatory guidelines which—

10 (A) establish comprehensive standards for all aspects of labora-
11 tory controlled substances testing and laboratory procedures to be
12 applied in carrying out this section, including standards which re-
13 quire the use of the best available technology for ensuring the full
14 reliability and accuracy of controlled substances tests and strict
15 procedures governing the chain of custody of specimen samples
16 collected for controlled substances testing;

17 (B) establish the minimum list of controlled substances for
18 which individuals may be tested; and

19 (C) establish appropriate standards and procedures for periodic
20 review of laboratories and criteria for certification and revocation
21 of certification of laboratories to perform controlled substances
22 testing in carrying out this section;

23 (3) require that all laboratories involved in the controlled substances
24 testing of any individual under this section shall have the capability
25 and facility, at such laboratory, of performing screening and confirma-
26 tion tests;

27 (4) provide that all tests which indicate the use, in violation of appli-
28 cable law or Federal regulation, of alcohol or a controlled substance by
29 any individual shall be confirmed by a scientifically recognized method
30 of testing capable of providing quantitative data regarding alcohol or
31 a controlled substance;

32 (5) provide that each specimen sample be subdivided, secured, and
33 labelled in the presence of the tested individual and that a portion
34 thereof be retained in a secure manner to prevent the possibility of
35 tampering, so that in the event the individual's confirmation test re-
36 sults are positive the individual has an opportunity to have the retained
37 portion assayed by a confirmation test done independently at a second
38 certified laboratory if the individual requests the independent test with-
39 in 3 days after being advised of the results of the initial confirmation
40 test;

(6) ensure appropriate safeguards for testing to detect and quantify alcohol in breath and body fluid samples, including urine and blood, through the development of regulations as may be necessary and in consultation with the Department of Health and Human Services;

(7) provide for the confidentiality of test results and medical information of employees; and

(8) ensure that employees are selected for tests by nondiscriminatory and impartial methods, so that no employee is harassed by being treated differently from other employees in similar circumstances.

(g) EFFECT ON OTHER LAWS AND REGULATIONS.—

(1) CONSISTENCY WITH FEDERAL REGULATION.—No State or local government shall adopt or have in effect any law, rule, regulation, ordinance, standard, or order that is inconsistent with the regulations promulgated under this section.

(2) CONTINUANCE OF REGULATIONS ISSUED BEFORE DECEMBER 9, 1991.—Nothing in this section shall be construed to restrict the discretion of the Administrator to continue in force, amend, or further supplement any regulations issued before December 9, 1991, that govern the use of alcohol and controlled substances by Administration employees with responsibility for safety-sensitive, security, and national security functions (as determined by the Administrator), or by Administration contractor employees with such responsibility.

§ 582. Aerospace Safety Advisory Panel

(a) ESTABLISHMENT AND MEMBERS.—There is established an Aerospace Safety Advisory Panel consisting of a maximum of 9 members who shall be appointed by the Administrator for terms of 6 years each. Not more than 4 such members shall be chosen from among the officers and employees of the Administration.

(b) CHAIRMAN.—One member shall be designated by the Panel as its Chairman.

(c) DUTIES.—The Panel shall—

(1) review safety studies and operations plans referred to it and make reports thereon;

(2) advise the Administrator with respect to the hazards of proposed or existing facilities and proposed operations and with respect to the adequacy of proposed or existing safety standards; and

(3) perform such other duties as the Administrator may request.

(d) COMPENSATION AND EXPENSES.—

(1) COMPENSATION.—

(A) FEDERAL OFFICERS AND EMPLOYEES.—A member of the Panel who is an officer or employee of the Federal Government shall receive no compensation for the member's services as such.

(B) MEMBERS APPOINTED FROM OUTSIDE THE FEDERAL GOVERNMENT.—A member of the Panel appointed from outside the Federal Government shall receive compensation, at a rate not to exceed the per diem rate equivalent to the maximum rate payable under section 5376 of title 5, for each day the member is engaged in the actual performance of duties vested in the Panel.

(2) EXPENSES.—A member of the Panel shall be allowed necessary travel expenses (or in the alternative, mileage for use of a privately owned vehicle and a per diem in lieu of subsistence not to exceed the rate and amount prescribed in sections 5702 and 5704 of title 5), and other necessary expenses incurred by the member in the performance of duties vested in the Panel, without regard to the provisions of subchapter I of chapter 57 of title 5, the Standardized Government Travel Regulations, or section 5731 of title 5.

SUBCHAPTER IX—COMPETITIVENESS AND INTERNATIONAL COOPERATION

§ 591. Competitiveness and international cooperation

(a) LIMITATION.—

(1) SOLICITATION OF COMMENT.—As part of the evaluation of the costs and benefits of entering into an obligation to conduct a space mission in which a foreign entity will participate as a supplier of the spacecraft, spacecraft system, or launch system, the Administrator shall solicit comment on the potential impact of such participation through notice published in Commerce Business Daily at least 45 days before entering into such an obligation.

(2) AGREEMENTS WITH PEOPLE'S REPUBLIC OF CHINA.—The Administrator shall certify to Congress at least 15 days in advance of any cooperative agreement with the People's Republic of China, or any company owned by the People's Republic of China or incorporated under the laws of the People's Republic of China, involving spacecraft, spacecraft systems, launch systems, or scientific or technical information, that—

(A) the agreement is not detrimental to the United States space launch industry; and

(B) the agreement, including any indirect technical benefit that could be derived from the agreement, will not improve the missile or space launch capabilities of the People's Republic of China.

(3) ANNUAL AUDIT.—The Inspector General of the Administration, in consultation with appropriate agencies, shall conduct an annual audit of the policies and procedures of the Administration with respect to the export of technologies and the transfer of scientific and technical information, to assess the extent to which the Administration is carrying out its activities in compliance with Federal export control laws and with paragraph (2).

(b) NATIONAL INTERESTS.—Before entering into an obligation described in subsection (a), the Administrator shall consider the national interests of the United States described in section 2(6) of the National Aeronautics and Space Administration Authorization Act of 2000 (Public Law 106–391, 114 Stat. 1578).

CHAPTER 7—NATIONAL SPACE GRANT COLLEGE AND FELLOWSHIP PROGRAM

Sec.

- 701. Congressional statement of findings.
- 702. Congressional statement of purposes.
- 703. Definitions.
- 704. National space grant college and fellowship program.
- 705. Grants or contracts.
- 706. Specific national needs.
- 707. Space grant college and space grant regional consortium.
- 708. Space grant fellowship program.
- 709. Space grant review panel.
- 710. Availability of other Federal personnel and data.
- 711. Designation or award to be on competitive basis.

§ 701. Congressional statement of findings

Congress finds that—

(1) the vitality of the Nation and the quality of life of the citizens of the Nation depend increasingly on the understanding, assessment, development, and utilization of space resources;

(2) research and development of space science, space technology, and space commercialization will contribute to the quality of life, national security, and the enhancement of commerce;

(3) the understanding and development of the space frontiers require a broad commitment and an intense involvement on the part of the Federal Government in partnership with State and local governments, private industry, universities, organizations, and individuals concerned with the exploration and utilization of space;

(4) the Administration, through the national space grant college and fellowship program, offers the most suitable means for such commitment and involvement through the promotion of activities that will result in greater understanding, assessment, development, and utilization; and

(5) Federal support of the establishment, development, and operation of programs and projects by space grant colleges, space grant regional consortia, institutions of higher education, institutes, laboratories, and other appropriate public and private entities is the most cost-effective way to promote such activities.

§ 702. Congressional statement of purposes

The purposes of this chapter are to—

(1) increase the understanding, assessment, development, and utilization of space resources by promoting a strong educational base, responsive research and training activities, and broad and prompt dissemination of knowledge and techniques;

(2) utilize the abilities and talents of the universities of the Nation to support and contribute to the exploration and development of the resources and opportunities afforded by the space environment;

(3) encourage and support, within the university community of the Nation, the existence of interdisciplinary and multidisciplinary programs of space research that—

(A) engage in integrated activities of training, research, and public service;

(B) have cooperative programs with industry; and

(C) are coordinated with the overall program of the Administration;

(4) encourage and support the existence of consortia, made up of university and industry members, in order to advance the exploration and development of space resources in cases in which national objectives can be better fulfilled through such consortia than through the programs of single universities;

(5) encourage and support Federal funding for graduate fellowships in fields related to space; and

(6) support activities in colleges and universities generally for the purpose of creating and operating a network of institutional programs that will enhance achievements resulting from efforts under this chapter.

§ 703. Definitions

In this chapter:

(1) **AERONAUTICAL AND SPACE ACTIVITIES.**—The term “aeronautical and space activities” has the meaning given the term in section 303 of this title.

(2) **FIELD RELATED TO SPACE.**—The term “field related to space” means any academic discipline or field of study (including the physical, natural, and biological sciences, and engineering, space technology, edu-

1 cation, economics, sociology, communications, planning, law, inter-
 2 national affairs, and public administration) which is concerned with or
 3 likely to improve the understanding, assessment, development, and uti-
 4 lization of space.

5 (3) PANEL.—The term “panel” means the space grant review panel
 6 established pursuant to section 709 of this title.

7 (4) PERSON.—The term “person” means any individual, any public
 8 or private corporation, partnership, or other association or entity (in-
 9 cluding any space grant college, space grant regional consortium, insti-
 10 tution of higher education, institute, or laboratory), or any State, polit-
 11 ical subdivision of a State, or agency or officer of a State or political
 12 subdivision of a State.

13 (5) SPACE ENVIRONMENT.—The term “space environment” means
 14 the environment beyond the sensible atmosphere of the Earth.

15 (6) SPACE GRANT COLLEGE.—The term “space grant college” means
 16 any public or private institution of higher education which is designated
 17 as such by the Administrator pursuant to section 707 of this title.

18 (7) SPACE GRANT PROGRAM.—The term “space grant program”
 19 means any program that—

20 (A) is administered by any space grant college, space grant re-
 21 gional consortium, institution of higher education, institute, lab-
 22 oratory, or State or local agency; and

23 (B) includes 2 or more projects involving education and one or
 24 more of the following activities in the fields related to space:

25 (i) Research.

26 (ii) Training.

27 (iii) Advisory services.

28 (8) SPACE GRANT REGIONAL CONSORTIUM.—The term “space grant
 29 regional consortium” means any association or other alliance that is
 30 designated as a space grant regional consortium by the Administrator
 31 pursuant to section 707 of this title.

32 (9) SPACE RESOURCE.—The term “space resource” means any tan-
 33 gible or intangible benefit which can be realized only from—

34 (A) aeronautical and space activities; or

35 (B) advancements in any field related to space.

36 (10) STATE.—The term “State” means any State of the United
 37 States, the District of Columbia, the Commonwealth of Puerto Rico,
 38 the Virgin Islands, Guam, American Samoa, the Commonwealth of the
 39 Northern Mariana Islands, or any other territory or possession of the
 40 United States.

1 **§ 704. National space grant college and fellowship program**

2 (a) ESTABLISHMENT.—The Administrator shall establish and maintain,
3 within the Administration, a program to be known as the national space
4 grant college and fellowship program. The national space grant college and
5 fellowship program shall consist of the financial assistance and other activi-
6 ties provided for in this chapter. The Administrator shall establish long-
7 range planning guidelines and priorities, and adequately evaluate the pro-
8 gram.

9 (b) FUNCTIONS.—Within the Administration, the program shall—

10 (1) apply the long-range planning guidelines and the priorities estab-
11 lished by the Administrator under subsection (a);

12 (2) advise the Administrator with respect to the expertise and capa-
13 bilities which are available through the national space grant college and
14 fellowship program, and make such expertise available to the Adminis-
15 tration as directed by the Administrator;

16 (3) evaluate activities conducted under grants and contracts awarded
17 pursuant to sections 705 and 706 of this title to ensure that the pur-
18 poses set forth in section 702 of this title are implemented;

19 (4) encourage other Federal departments, agencies, and instrumen-
20 talities to use and take advantage of the expertise and capabilities
21 which are available through the national space grant college and fellow-
22 ship program, on a cooperative or other basis;

23 (5) encourage cooperation and coordination with other Federal pro-
24 grams concerned with the development of space resources and fields re-
25 lated to space;

26 (6) advise the Administrator on the designation of recipients sup-
27 ported by the national space grant college and fellowship program and,
28 in appropriate cases, on the termination or suspension of any such des-
29 ignation; and

30 (7) encourage the formation and growth of space grant and fellow-
31 ship programs.

32 (c) GENERAL AUTHORITIES.—To carry out the provisions of this chapter,
33 the Administrator may—

34 (1) accept conditional or unconditional gifts or donations of services,
35 money, or property, real, personal or mixed, tangible or intangible;

36 (2) accept and use funds from other Federal departments, agencies,
37 and instrumentalities to pay for fellowships, grants, contracts, and
38 other transactions; and

39 (3) issue such rules and regulations as may be necessary and appro-
40 priate.

1 **§ 705. Grants or contracts**

2 (a) **AUTHORITY OF ADMINISTRATOR.**—The Administrator may make
3 grants and enter into contracts or other transactions under this subsection
4 to assist any space grant and fellowship program or project if the Adminis-
5 trator finds that the program or project will carry out the purposes set forth
6 in section 702 of this title. The total amount paid pursuant to a grant or
7 contract may equal not more than 66 percent of the total cost of the space
8 grant and fellowship program or project involved, except in the case of
9 grants or contracts paid for with funds accepted by the Administrator pur-
10 suant to section 704(c)(2) of this title.

11 (b) **SPECIAL GRANTS.**—The Administrator may make special grants
12 under this subsection to carry out the purposes set forth in section 702 of
13 this title. The amount of a special grant may equal up to 100 percent of
14 the total cost of the project involved. A special grant may be made under
15 this subsection only if the Administrator finds that—

16 (1) no reasonable means is available through which the applicant can
17 meet the matching requirement for a grant under subsection (a);

18 (2) the probable benefit of the project outweighs the public interest
19 in the matching requirement; and

20 (3) the same or equivalent benefit cannot be obtained through the
21 award of a contract or grant under subsection (a) or section 706 of
22 this title.

23 (c) **APPLICATION.**—Any person may apply to the Administrator for a
24 grant or contract under this section. Application shall be made in such form
25 and manner, and with such content and other submissions, as the Adminis-
26 trator shall by regulation prescribe.

27 (d) **TERMS AND CONDITIONS.**—

28 (1) **IN GENERAL.**—Any grant made, or contract entered into, under
29 this section shall be subject to the limitations and provisions set forth
30 in paragraphs (2) and (3) and to such other terms, conditions, and re-
31 quirements as the Administrator considers necessary or appropriate.

32 (2) **LIMITATIONS.**—No payment under any grant or contract under
33 this section may be applied to—

34 (A) the purchase of any land;

35 (B) the purchase, construction, preservation, or repair of any
36 building; or

37 (C) the purchase or construction of any launch facility or launch
38 vehicle.

39 (3) **LEASES.**—Notwithstanding paragraph (2), the items in subpara-
40 graphs (A), (B), and (C) of such paragraph may be leased upon writ-
41 ten approval of the Administrator.

(4) RECORDS.—Any person that receives or utilizes any proceeds of any grant or contract under this section shall keep such records as the Administrator shall by regulation prescribe as being necessary and appropriate to facilitate effective audit and evaluation, including records which fully disclose the amount and disposition by such recipient of such proceeds, the total cost of the program or project in connection with which such proceeds were used, and the amount, if any, of such cost which was provided through other sources. Such records shall be maintained for 3 years after the completion of such a program or project. The Administrator and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access, for the purpose of audit and evaluation, to any books, documents, papers, and records of receipts which, in the opinion of the Administrator or the Comptroller General, may be related or pertinent to such grants and contracts.

§ 706. Specific national needs

(a) IDENTIFICATION OF SPECIFIC NEEDS AND GRANT-MAKING AND CONTRACTING AUTHORITY.—The Administrator shall identify specific national needs and problems relating to space. The Administrator may make grants or enter into contracts under this section with respect to such needs or problems. The amount of any such grant or contract may equal up to 100 percent of the total cost of the project involved.

(b) APPLICATIONS FOR GRANTS OR CONTRACTS.—Any person may apply to the Administrator for a grant or contract under this section. In addition, the Administrator may invite applications with respect to specific national needs or problems identified under subsection (a). Application shall be made in such form and manner, and with such content and other submissions, as the Administrator shall by regulation prescribe. Any grant made, or contract entered into, under this section shall be subject to the limitations and provisions set forth in paragraphs (2) and (4) of section 705(d) of this title and to such other terms, conditions, and requirements as the Administrator considers necessary or appropriate.

§ 707. Space grant college and space grant regional consortium

(a) DESIGNATION AND QUALIFICATIONS.—

(1) AUTHORITY TO DESIGNATE.—The Administrator may designate—

(A) any institution of higher education as a space grant college;

and

(B) any association or other alliance of 2 or more persons, other than individuals, as a space grant regional consortium.

(2) SPACE GRANT COLLEGE REQUIREMENTS.—No institution of higher education may be designated as a space grant college unless the Administrator finds that such institution—

(A) is maintaining a balanced program of research, education, training, and advisory services in fields related to space;

(B) will act in accordance with such guidelines as are prescribed under subsection (b)(2); and

(C) meets such other qualifications as the Administrator considers necessary or appropriate.

(3) SPACE GRANT REGIONAL CONSORTIUM REQUIREMENTS.—No association or other alliance of 2 or more persons may be designated as a space grant regional consortium unless the Administrator finds that such association or alliance—

(A) is established for the purpose of sharing expertise, research, educational facilities or training facilities, and other capabilities in order to facilitate research, education, training, and advisory services in any field related to space;

(B) will encourage and follow a regional approach to solving problems or meeting needs relating to space, in cooperation with appropriate space grant colleges, space grant programs, and other persons in the region;

(C) will act in accordance with such guidelines as are prescribed under subsection (b)(2); and

(D) meets such other qualifications as the Administrator considers necessary or appropriate.

(b) QUALIFICATIONS AND GUIDELINES.—The Administrator shall by regulation prescribe—

(1) the qualifications required to be met under paragraphs (2)(C) and (3)(D) of subsection (a); and

(2) guidelines relating to the activities and responsibilities of space grant colleges and space grant regional consortia.

(c) SUSPENSION OR TERMINATION OF DESIGNATION.—The Administrator may, for cause and after an opportunity for hearing, suspend or terminate any designation under subsection (a).

§ 708. Space grant fellowship program

(a) AWARD OF FELLOWSHIPS.—The Administrator shall support a space grant fellowship program to provide educational and training assistance to qualified individuals at the graduate level of education in fields related to space. Such fellowships shall be awarded pursuant to guidelines established by the Administrator. Space grant fellowships shall be awarded to individuals at space grant colleges, space grant regional consortia, other colleges

and institutions of higher education, professional associations, and institutes in such a manner as to ensure wide geographic and institutional diversity in the pursuit of research under the fellowship program.

(b) LIMITATION ON AMOUNT PROVIDED.—The total amount which may be provided for grants under the space grant fellowship program during any fiscal year shall not exceed an amount equal to 50 percent of the total funds appropriated for such year pursuant to this chapter.

(c) AUTHORITY TO SPONSOR OTHER RESEARCH FELLOWSHIP PROGRAMS UNAFFECTED.—Nothing in this section shall be construed to prohibit the Administrator from sponsoring any research fellowship program, including any special emphasis program, which is established under an authority other than this chapter.

§ 709. Space grant review panel

(a) ESTABLISHMENT.—The Administrator shall establish an independent committee known as the space grant review panel, which shall not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.).

(b) DUTIES.—The panel shall take such steps as may be necessary to review, and shall advise the Administrator with respect to—

(1) applications or proposals for, and performance under, grants and contracts awarded pursuant to sections 705 and 706 of this title;

(2) the space grant fellowship program;

(3) the designation and operation of space grant colleges and space grant regional consortia, and the operation of space grant and fellowship programs;

(4) the formulation and application of the planning guidelines and priorities pursuant to subsections (a) and (b)(1) of section 704 of this title; and

(5) such other matters as the Administrator refers to the panel for review and advice.

(c) PERSONNEL AND ADMINISTRATIVE SERVICES.—The Administrator shall make available to the panel any information, personnel, and administrative services and assistance which is reasonable to carry out the duties of the panel.

(d) MEMBERS.—

(1) APPOINTMENT.—The Administrator shall appoint the voting members of the panel. A majority of the voting members shall be individuals who, by reason of knowledge, experience, or training, are especially qualified in one or more of the disciplines and fields related to space. The other voting members shall be individuals who, by reason of knowledge, experience, or training, are especially qualified in, or representative of, education, extension services, State government, indus-

try, economics, planning, or any other activity related to efforts to enhance the understanding, assessment, development, or utilization of space resources. The Administrator shall consider the potential conflict of interest of any individual in making appointments to the panel.

(2) CHAIRMAN AND VICE CHAIRMAN.—The Administrator shall select one voting member to serve as the Chairman and another voting member to serve as the Vice Chairman. The Vice Chairman shall act as Chairman in the absence or incapacity of the Chairman.

(3) REIMBURSEMENT FOR EXPENSES.—Voting members of the panel who are not Federal employees shall be reimbursed for actual and reasonable expenses incurred in the performance of such duties.

(4) MEETINGS.—The panel shall meet on a biannual basis and, at any other time, at the call of the Chairman or upon the request of a majority of the voting members or of the Administrator.

(5) POWERS.—The panel may exercise such powers as are reasonably necessary in order to carry out the duties enumerated in subsection (b).

§ 710. Availability of other Federal personnel and data

Each department, agency, or other instrumentality of the Federal Government that is engaged in or concerned with, or that has authority over, matters relating to space—

(1) may, upon a written request from the Administrator, make available, on a reimbursable basis or otherwise, any personnel (with their consent and without prejudice to their position and rating), service, or facility which the Administrator considers necessary to carry out any provision of this chapter;

(2) may, upon a written request from the Administrator, furnish any available data or other information which the Administrator considers necessary to carry out any provision of this chapter; and

(3) may cooperate with the Administration.

§ 711. Designation or award to be on competitive basis

The Administrator shall not under this chapter designate any space grant college or space grant regional consortium or award any fellowship, grant, or contract unless such designation or award is made in accordance with the competitive, merit-based review process employed by the Administration on October 30, 1987.

CHAPTER 9—BIOMEDICAL RESEARCH IN SPACE

Sec.

- 901. Findings.
- 902. Biomedical research joint working group.
- 903. Biomedical research grants.
- 904. Biomedical research fellowships.
- 905. Establishment of electronic data archive.
- 906. Establishment of emergency medical service telemedicine capability.

1 **§ 901. Findings**

2 Congress finds that—

3 (1) the space program can make significant contributions to selected
4 areas of health-related research and should be an integral part of the
5 Nation's health research and development program;

6 (2) the continuing development of trained scientists and engineers is
7 essential to carrying out an effective and sustained program of bio-
8 medical research in space and on the ground;

9 (3) the establishment and maintenance of an electronically accessible
10 archive of data on space-related biomedical research is essential to ad-
11 vancement of the field;

12 (4) cooperation with the republics of the former Soviet Union, in-
13 cluding use of former Soviet orbital facilities, offers the potential for
14 greatly enhanced biomedical research activities and progress; and

15 (5) the establishment and maintenance of an international telemedi-
16 cine consultation satellite capability to support emergency medical serv-
17 ice provision can provide an important aid to disaster relief efforts.

18 **§ 902. Biomedical research joint working group**

19 (a) ESTABLISHMENT.—The Administrator and the Director of the Na-
20 tional Institutes of Health shall jointly establish a working group to coordi-
21 nate biomedical research activities in areas where a microgravity environ-
22 ment may contribute to significant progress in the understanding and treat-
23 ment of diseases and other medical conditions. The joint working group
24 shall formulate joint and complementary programs in such areas of re-
25 search.

26 (b) MEMBERSHIP.—The joint working group shall include equal represen-
27 tation from the Administration and the National Institutes of Health, and
28 shall include representation from National Institutes of Health councils, as
29 selected by the Director of the National Institutes of Health, and from the
30 National Aeronautics and Space Administration Advisory Council.

31 (c) ANNUAL BIOMEDICAL RESEARCH SYMPOSIA.—The joint working
32 group shall organize annual symposia on biomedical research described in
33 subsection (a) under the joint sponsorship of the Administration and the
34 National Institutes of Health.

35 (d) ANNUAL REPORTING REQUIREMENT.—The joint working group shall
36 report annually to Congress on its progress in carrying out this section.

37 **§ 903. Biomedical research grants**

38 (a) ESTABLISHMENT OF PROGRAM.—The Administrator and the Director
39 of the National Institutes of Health shall establish a joint program of bio-
40 medical research grants in areas described in section 902(a) of this title,
41 where such research requires access to a microgravity environment. Such

program shall be consistent with actions taken by the joint working group under section 902 of this title.

(b) RESEARCH OPPORTUNITY ANNOUNCEMENTS.—The grants program established under subsection (a) shall annually issue joint research opportunity announcements under the sponsorship of the National Institutes of Health and the Administration. Responses to the announcements shall be evaluated by a peer review committee whose members shall be selected by the Director of the National Institutes of Health and the Administrator, and shall include individuals not employed by the Administration or the National Institutes of Health.

§ 904. Biomedical research fellowships

The Administrator and the Director of the National Institutes of Health shall create a joint program of graduate research fellowships in biomedical research described in section 902(a) of this title. Fellowships under such program may provide for participation in approved research conferences and symposia.

§ 905. Establishment of electronic data archive

The Administrator shall create and maintain a national electronic data archive for biomedical research data obtained from space-based experiments.

§ 906. Establishment of emergency medical service telemedicine capability

The Administrator, the Director of the Federal Emergency Management Agency, the Director of the Office of Foreign Disaster Assistance, and the Surgeon General of the United States shall jointly create and maintain an international telemedicine satellite consultation capability to support emergency medical services in disaster-stricken areas.

CHAPTER 11—LAND REMOTE SENSING POLICY

SUBCHAPTER I—FINDINGS AND DEFINITIONS

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SUBCHAPTER I—FINDINGS AND DEFINITIONS

§ 1101. Findings

Congress finds and declares the following:

(1) The continuous collection and utilization of land remote sensing data from space are of major benefit in studying and understanding human impacts on the global environment, in managing the Earth's natural resources, in carrying out national security functions, and in planning and conducting many other activities of scientific, economic, and social importance.

(2) The Federal Government's Landsat system established the United States as the world leader in land remote sensing technology.

(3) The national interest of the United States lies in maintaining international leadership in satellite land remote sensing and in broadly promoting the beneficial use of remote sensing data.

(4) The cost of Landsat data has impeded the use of such data for scientific purposes, such as for global environmental change research, as well as for other public sector applications.

(5) Given the importance of the Landsat program to the United States, urgent actions, including expedited procurement procedures, are required to ensure data continuity.

(6) Full commercialization of the Landsat program cannot be achieved within the foreseeable future, and thus should not serve as the near-term goal of national policy on land remote sensing; however, commercialization of land remote sensing should remain a long-term goal of United States policy.

(7) Despite the success and importance of the Landsat system, funding and organizational uncertainties over the past several years have placed its future in doubt and have jeopardized United States leadership in land remote sensing.

(8) Recognizing the importance of the Landsat program in helping to meet national and commercial objectives, the President approved, on February 11, 1992, a National Space Policy Directive which was devel-

oped by the National Space Council and commits the United States to ensuring the continuity of Landsat coverage into the 21st century.

(9) Because Landsat data are particularly important for national security purposes and global environmental change research, management responsibilities for the program should be transferred from the Department of Commerce to an integrated program management involving the Department of Defense and the Administration.

(10) Regardless of management responsibilities for the Landsat program, the Nation's broad civilian, national security, commercial, and foreign policy interests in remote sensing will best be served by ensuring that Landsat remains an unclassified program that operates according to the principles of open skies and nondiscriminatory access.

(11) Technological advances aimed at reducing the size and weight of satellite systems hold the potential for dramatic reductions in the cost, and substantial improvements in the capabilities, of future land remote sensing systems, but such technological advances have not been demonstrated for land remote sensing and therefore cannot be relied upon as the sole means of achieving data continuity for the Landsat program.

(12) A technology demonstration program involving advanced remote sensing technologies could serve a vital role in determining the design of a follow-on spacecraft to Landsat 7, while also helping to determine whether such a spacecraft should be funded by the United States Government, by the private sector, or by an international consortium.

(13) To maximize the value of the Landsat program to the American public, unenhanced Landsat 4 through 6 data should be made available, at a minimum, to United States Government agencies, to global environmental change researchers, and to other researchers that are financially supported by the United States Government, at the cost of fulfilling user requests, and unenhanced Landsat 7 data should be made available to all users at the cost of fulfilling user requests.

(14) To stimulate development of the commercial market for unenhanced data and value-added services, the United States Government should adopt a data policy for Landsat 7 which allows competition within the private sector for distribution of unenhanced data and value-added services.

(15) Development of the remote sensing market and the provision of commercial value-added services based on remote sensing data should remain exclusively the function of the private sector.

(16) It is in the best interest of the United States to maintain a permanent, comprehensive Government archive of global Landsat and

other land remote sensing data for long-term monitoring and study of the changing global environment.

§ 1102. Definitions

In this chapter:

(1) COST OF FULFILLING USER REQUESTS.—The term “cost of fulfilling user requests” means the incremental costs associated with providing product generation, reproduction, and distribution of unenhanced data in response to user requests and shall not include any acquisition, amortization, or depreciation of capital assets originally paid for by the United States Government or other costs not specifically attributable to fulfilling user requests.

(2) DATA CONTINUITY.—The term “data continuity” means the continued acquisition and availability of unenhanced data which are, from the point of view of the user—

(A) sufficiently consistent (in terms of acquisition geometry, coverage characteristics, and spectral characteristics) with previous Landsat data to allow comparisons for global and regional change detection and characterization; and

(B) compatible with such data and with methods used to receive and process such data.

(3) DATA PREPROCESSING.—The term “data preprocessing”—

(A) may include—

(i) rectification of system and sensor distortions in land remote sensing data as it is received directly from the satellite in preparation for delivery to a user;

(ii) registration of such data with respect to features of the Earth; and

(iii) calibration of spectral response with respect to such data; but

(B) does not include conclusions, manipulations, or calculations derived from such data, or a combination of such data with other data.

(4) LAND REMOTE SENSING.—The term “land remote sensing” means the collection of data which can be processed into imagery of surface features of the Earth from an unclassified satellite or satellites, other than an operational United States Government weather satellite.

(5) LANDSAT PROGRAM MANAGEMENT.—The term “Landsat Program Management” means the integrated program management structure—

(A) established by, and responsible to, the Administrator and the Secretary of Defense pursuant to section 1111(a) of this title; and

(B) consisting of appropriate officers and employees of the Administration, the Department of Defense, and any other United States Government agencies the President designates as responsible for the Landsat program.

(6) LANDSAT SYSTEM.—The term “Landsat system” means Landsats 1, 2, 3, 4, 5, and 6, and any follow-on land remote sensing system operated and owned by the United States Government, along with any related ground equipment, systems, and facilities owned by the United States Government.

(7) LANDSAT 6 CONTRACTOR.—The term “Landsat 6 contractor” means the private sector entity which was awarded the contract for spacecraft construction, operations, and data marketing rights for the Landsat 6 spacecraft.

(8) LANDSAT 7.—The term “Landsat 7” means the follow-on satellite to Landsat 6.

(9) NATIONAL SATELLITE LAND REMOTE SENSING DATA ARCHIVE.—The term “National Satellite Land Remote Sensing Data Archive” means the archive established by the Secretary of the Interior pursuant to the archival responsibilities defined in section 1142 of this title.

(10) NONCOMMERCIAL PURPOSES.—The term “noncommercial purposes” means activities undertaken by individuals or entities on the condition, upon receipt of unenhanced data, that—

(A) such data shall not be used in connection with any bid for a commercial contract, development of a commercial product, or any other non-United States Government activity that is expected, or has the potential, to be profitmaking;

(B) the results of such activities are disclosed in a timely and complete fashion in the open technical literature or other method of public release, except when such disclosure by the United States Government or its contractors would adversely affect the national security or foreign policy of the United States or violate a provision of law or regulation; and

(C) such data shall not be distributed in competition with unenhanced data provided by the Landsat 6 contractor.

(11) SECRETARY.—The term “Secretary” means the Secretary of Commerce.

(12) UNENHANCED DATA.—The term “unenhanced data” means land remote sensing signals or imagery products that are unprocessed or subject only to data preprocessing.

(13) UNITED STATES GOVERNMENT AND ITS AFFILIATED USERS.—The term “United States Government and its affiliated users” means—

(A) United States Government agencies;

(B) researchers involved with the United States Global Change Research Program and its international counterpart programs; and

(C) other researchers and international entities that have signed with the United States Government a cooperative agreement involving the use of Landsat data for noncommercial purposes.

SUBCHAPTER II—LANDSAT

§ 1111. Landsat Program Management

(a) ESTABLISHMENT.—The Administrator and the Secretary of Defense shall be responsible for management of the Landsat program. Such responsibility shall be carried out by establishing an integrated program management structure for the Landsat system.

(b) MANAGEMENT PLAN.—The Administrator, the Secretary of Defense, and any other United States Government official the President designates as responsible for part of the Landsat program shall establish, through a management plan, the roles, responsibilities, and funding expectations for the Landsat program of the appropriate United States Government agencies. The management plan shall—

(1) specify that the fundamental goal of the Landsat Program Management is the continuity of unenhanced Landsat data through the acquisition and operation of a Landsat 7 satellite as quickly as practicable which is, at a minimum, functionally equivalent to the Landsat 6 satellite, with the addition of a tracking and data relay satellite communications capability;

(2) include a baseline funding profile that—

(A) is mutually acceptable to the Administration and the Department of Defense for the period covering the development and operation of Landsat 7; and

(B) provides for total funding responsibility of the Administration and the Department of Defense, respectively, to be approximately equal to the funding responsibility of the other as spread across the development and operational life of Landsat 7;

(3) specify that any improvements over the Landsat 6 functional equivalent capability for Landsat 7 will be funded by a specific sponsoring agency or agencies, in a manner agreed to by the Landsat Pro-

gram Management, if the required funding exceeds the baseline funding profile required by paragraph (2), and that additional improvements will be sought only if the improvements will not jeopardize data continuity; and

(4) provide for a technology demonstration program whose objective shall be the demonstration of advanced land remote sensing technologies that may potentially yield a system which is less expensive to build and operate, and more responsive to data users, than is the current Landsat system.

(c) RESPONSIBILITIES.—The Landsat Program Management shall be responsible for—

(1) Landsat 7 procurement, launch, and operations;

(2) ensuring that the operation of the Landsat system is responsive to the broad interests of the civilian, national security, commercial, and foreign users of the Landsat system;

(3) ensuring that all unenhanced Landsat data remain unclassified and that, except as provided in subsections (a) and (b) of section 1146 of this title, no restrictions are placed on the availability of unenhanced data;

(4) ensuring that land remote sensing data of high priority locations will be acquired by the Landsat 7 system as required to meet the needs of the United States Global Change Research Program, as established in the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.), and to meet the needs of national security users;

(5) Landsat data responsibilities pursuant to this chapter;

(6) oversight of Landsat contracts entered into under section 1112 of this title;

(7) coordination of a technology demonstration program pursuant to section 1133 of this title; and

(8) ensuring that copies of data acquired by the Landsat system are provided to the National Satellite Land Remote Sensing Data Archive.

(d) AUTHORITY TO CONTRACT.—The Landsat Program Management may, subject to appropriations and only under the existing contract authority of the United States Government agencies that compose the Landsat Program Management, enter into contracts with the private sector for services such as satellite operations and data preprocessing.

(e) LANDSAT ADVISORY PROCESS.—

(1) ADVICE AND COMMENTS.—The Landsat Program Management shall seek impartial advice and comments regarding the status, effectiveness, and operation of the Landsat system, using existing advisory

committees and other appropriate mechanisms. Such advice shall be sought from individuals who represent—

(A) a broad range of perspectives on basic and applied science and operational needs with respect to land remote sensing data;

(B) the full spectrum of users of Landsat data, including representatives from United States Government agencies, State and local government agencies, academic institutions, nonprofit organizations, value-added companies, the agricultural, mineral extraction, and other user industries, and the public; and

(C) a broad diversity of age groups, sexes, and races.

(2) REPORTS.—The Landsat Program Management shall prepare and submit biennially a report to Congress which—

(A) reports the public comments received pursuant to paragraph (1); and

(B) includes—

(i) a response to the public comments received pursuant to paragraph (1);

(ii) information on the volume of use, by category, of data from the Landsat system; and

(iii) any recommendations for policy or programmatic changes to improve the utility and operation of the Landsat system.

§ 1112. Procurement of Landsat 7

(a) CONTRACT NEGOTIATIONS.—The Landsat Program Management shall, subject to appropriations and only under the existing contract authority of the United States Government agencies that compose the Landsat Program Management, expeditiously contract with a United States private sector entity for the development and delivery of Landsat 7.

(b) DEVELOPMENT AND DELIVERY CONSIDERATION.—In negotiating a contract under this section for the development and delivery of Landsat 7, the Landsat Program Management shall—

(1) seek, as a fundamental objective, to have Landsat 7 operational by the expected end of the design life of Landsat 6;

(2) seek to ensure data continuity by the development and delivery of a satellite which is, at a minimum, functionally equivalent to the Landsat 6 satellite; and

(3) seek to incorporate in Landsat 7 any performance improvements required to meet United States Government needs that would not jeopardize data continuity.

(c) NOTIFICATION OF COST AND SCHEDULE CHANGES.—The Landsat Program Management shall promptly notify Congress of any significant de-

1 viations from the expected cost, delivery date, and launch date of Landsat
 2 7, that are specified by the Landsat Program Management upon award of
 3 the contract under this section.

4 (d) UNITED STATES PRIVATE SECTOR ENTITIES.—The Landsat Pro-
 5 gram Management shall, for purposes of this chapter, define the term
 6 “United States private sector entities”, taking into account the location of
 7 operations, assets, personnel, and other such factors.

8 **§ 1113. Transfer of Landsat 6 program responsibilities**

9 The responsibilities of the Secretary with respect to Landsat 6 shall be
 10 transferred to the Landsat Program Management, as agreed to between the
 11 Secretary and the Landsat Program Management, pursuant to section 1111
 12 of this title.

13 **§ 1114. Data policy for Landsat 7**

14 (a) LANDSAT 7 DATA POLICY.—The Landsat Program Management, in
 15 consultation with other appropriate United States Government agencies,
 16 shall develop a data policy for Landsat 7 which should—

17 (1) ensure that unenhanced data are available to all users at the cost
 18 of fulfilling user requests;

19 (2) ensure timely and dependable delivery of unenhanced data to the
 20 full spectrum of civilian, national security, commercial, and foreign
 21 users and the National Satellite Land Remote Sensing Data Archive;

22 (3) ensure that the United States retains ownership of all
 23 unenhanced data generated by Landsat 7;

24 (4) support the development of the commercial market for remote
 25 sensing data;

26 (5) ensure that the provision of commercial value-added services
 27 based on remote sensing data remains exclusively the function of the
 28 private sector; and

29 (6) to the extent possible, ensure that the data distribution system
 30 for Landsat 7 is compatible with the Earth Observing System Data
 31 and Information System.

32 (b) ADDITIONAL DATA POLICY CONSIDERATIONS.—In addition, the data
 33 policy for Landsat 7 may provide for—

34 (1) United States private sector entities to operate ground receiving
 35 stations in the United States for Landsat 7 data;

36 (2) other means for direct access by private sector entities to
 37 unenhanced data from Landsat 7; and

38 (3) the United States Government to charge a per image fee, license
 39 fee, or other such fee to entities operating ground receiving stations or
 40 distributing Landsat 7 data.

SUBCHAPTER III—LICENSING OF PRIVATE REMOTE SENSING
SPACE SYSTEMS

§ 1121. General licensing authority

(a) LICENSING AUTHORITY OF SECRETARY.—

(1) IN GENERAL.—In consultation with other appropriate United States Government agencies, the Secretary is authorized to license private sector parties to operate private remote sensing space systems for such period as the Secretary may specify and in accordance with the provisions of this subchapter.

(2) LIMITATION WITH RESPECT TO SYSTEM USED FOR OTHER PURPOSES.—In the case of a private space system that is used for remote sensing and other purposes, the authority of the Secretary under this subchapter shall be limited only to the remote sensing operations of such space system.

(b) COMPLIANCE WITH LAW, REGULATIONS, INTERNATIONAL OBLIGATIONS, AND NATIONAL SECURITY.—

(1) IN GENERAL.—No license shall be granted by the Secretary unless the Secretary determines in writing that the applicant will comply with the requirements of this chapter, any regulations issued pursuant to this chapter, and any applicable international obligations and national security concerns of the United States.

(2) LIST OF REQUIREMENTS FOR COMPLETE APPLICATION.—The Secretary shall publish in the Federal Register a complete and specific list of all information required to comprise a complete application for a license under this subchapter. An application shall be considered complete when the applicant has provided all information required by the list most recently published in the Federal Register before the date the application was first submitted. Unless the Secretary has, within 30 days after receipt of an application, notified the applicant of information necessary to complete an application, the Secretary may not deny the application on the basis of the absence of any such information.

(c) DEADLINE FOR ACTION ON APPLICATION.—The Secretary shall review any application and make a determination thereon within 120 days of the receipt of such application. If final action has not occurred within such time, the Secretary shall inform the applicant of any pending issues and of actions required to resolve them.

(d) IMPROPER BASIS FOR DENIAL.—The Secretary shall not deny such license in order to protect any existing licensee from competition.

(e) REQUIREMENT TO PROVIDE UNENHANCED DATA.—

(1) DESIGNATION OF DATA.—The Secretary, in consultation with other appropriate United States Government agencies and pursuant to paragraph (2), shall designate in a license issued pursuant to this subchapter any unenhanced data required to be provided by the licensee under section 1122(b)(3) of this title.

(2) PRELIMINARY DETERMINATION.—The Secretary shall make a designation under paragraph (1) after determining that—

(A) such data are generated by a system for which all or a substantial part of the development, fabrication, launch, or operations costs have been or will be directly funded by the United States Government; or

(B) it is in the interest of the United States to require such data to be provided by the licensee consistent with section 1122(b)(3) of this title, after considering the impact on the licensee and the importance of promoting widespread access to remote sensing data from United States and foreign systems.

(3) CONSISTENCY WITH CONTRACT OR OTHER ARRANGEMENT.—A designation made by the Secretary under paragraph (1) shall not be inconsistent with any contract or other arrangement entered into between a United States Government agency and the licensee.

§ 1122. Conditions for operation

(a) LICENSE REQUIRED FOR OPERATION.—No person that is subject to the jurisdiction or control of the United States may, directly or through any subsidiary or affiliate, operate any private remote sensing space system without a license pursuant to section 1121 of this title.

(b) LICENSING REQUIREMENTS.—Any license issued pursuant to this subchapter shall specify that the licensee shall comply with all of the requirements of this chapter and shall—

(1) operate the system in such manner as to preserve the national security of the United States and to observe the international obligations of the United States in accordance with section 1146 of this title;

(2) make available to the government of any country (including the United States) unenhanced data collected by the system concerning the territory under the jurisdiction of such government as soon as such data are available and on reasonable terms and conditions;

(3) make unenhanced data designated by the Secretary in the license pursuant to section 1121(e) of this title available in accordance with section 1141 of this title;

(4) upon termination of operations under the license, make disposition of any satellites in space in a manner satisfactory to the President;

(5) furnish the Secretary with complete orbit and data collection characteristics of the system, and inform the Secretary immediately of any deviation; and

(6) notify the Secretary of any significant or substantial agreement the licensee intends to enter with a foreign nation, entity, or consortium involving foreign nations or entities.

(c) ADDITIONAL LICENSING REQUIREMENTS FOR LANDSAT 6 CONTRACTOR.—In addition to the requirements of subsection (b), any license issued pursuant to this subchapter to the Landsat 6 contractor shall specify that the Landsat 6 contractor shall—

(1) notify the Secretary of any value added activities (as defined by the Secretary by regulation) that will be conducted by the Landsat 6 contractor or by a subsidiary or affiliate; and

(2) if such activities are to be conducted, provide the Secretary with a plan for compliance with section 1141 of this title.

§ 1123. Administrative authority of Secretary

(a) FUNCTIONS.—In order to carry out the responsibilities specified in this subchapter, the Secretary may—

(1) grant, condition, or transfer licenses under this chapter;

(2) seek an order of injunction or similar judicial determination from a district court of the United States with personal jurisdiction over the licensee to terminate, modify, or suspend licenses under this subchapter and to terminate licensed operations on an immediate basis, if the Secretary determines that the licensee has substantially failed to comply with any provisions of this chapter, with any terms, conditions, or restrictions of such license, or with any international obligations or national security concerns of the United States;

(3) provide penalties for noncompliance with the requirements of licenses or regulations issued under this subchapter, including civil penalties not to exceed \$10,000 (each day of operation in violation of such licenses or regulations constituting a separate violation);

(4) compromise, modify, or remit any such civil penalty;

(5) issue subpoenas for any materials, documents, or records, or for the attendance and testimony of witnesses for the purpose of conducting a hearing under this section;

(6) seize any object, record, or report pursuant to a warrant from a magistrate based on a showing of probable cause to believe that such object, record, or report was used, is being used, or is likely to be used in violation of this chapter or the requirements of a license or regulation issued thereunder; and

1 (7) make investigations and inquiries and administer to or take from
2 any person an oath, affirmation, or affidavit concerning any matter re-
3 lating to the enforcement of this chapter.

4 (b) REVIEW OF AGENCY ACTION.—Any applicant or licensee that makes
5 a timely request for review of an adverse action pursuant to paragraph (1),
6 (3), (5), or (6) of subsection (a) shall be entitled to adjudication by the Sec-
7 retary on the record after an opportunity for any agency hearing with re-
8 spect to such adverse action. Any final action by the Secretary under this
9 subsection shall be subject to judicial review under chapter 7 of title 5.

10 **§ 1124. Regulatory authority of Secretary**

11 The Secretary may issue regulations to carry out this subchapter. Such
12 regulations shall be promulgated only after public notice and comment in
13 accordance with the provisions of section 553 of title 5.

14 **§ 1125. Agency activities**

15 (a) LICENSE APPLICATION AND ISSUANCE.—A private sector party may
16 apply for a license to operate a private remote sensing space system which
17 utilizes, on a space-available basis, a civilian United States Government sat-
18 ellite or vehicle as a platform for such system. The Secretary, pursuant to
19 this subchapter, may license such system if it meets all conditions of this
20 subchapter and—

21 (1) the system operator agrees to reimburse the Government in a
22 timely manner for all related costs incurred with respect to such utili-
23 zation, including a reasonable and proportionate share of fixed, plat-
24 form, data transmission, and launch costs; and

25 (2) such utilization would not interfere with or otherwise compromise
26 intended civilian Government missions, as determined by the agency re-
27 sponsible for such civilian platform.

28 (b) ASSISTANCE.—The Secretary may offer assistance to private sector
29 parties in finding appropriate opportunities for such utilization.

30 (c) AGREEMENTS.—To the extent provided in advance by appropriation
31 Acts, any United States Government agency may enter into agreements for
32 such utilization if such agreements are consistent with such agency's mis-
33 sion and statutory authority, and if such remote sensing space system is li-
34 censed by the Secretary before commencing operation.

35 (d) APPLICABILITY.—This section does not apply to activities carried out
36 under subchapter IV.

37 (e) EFFECT ON FCC AUTHORITY.—Nothing in this subchapter shall af-
38 fect the authority of the Federal Communications Commission pursuant to
39 the Communications Act of 1934 (47 U.S.C. 151 et seq.).

SUBCHAPTER IV—RESEARCH, DEVELOPMENT, AND
DEMONSTRATION

§ 1131. Continued Federal research and development

(a) ROLES OF ADMINISTRATION AND DEPARTMENT OF DEFENSE.—

(1) IN GENERAL.—The Administrator and the Secretary of Defense are directed to continue and to enhance programs of remote sensing research and development.

(2) ADMINISTRATION ACTIVITIES AUTHORIZED AND ENCOURAGED.—
The Administrator is authorized and encouraged to—

(A) conduct experimental space remote sensing programs (including applications demonstration programs and basic research at universities);

(B) develop remote sensing technologies and techniques, including those needed for monitoring the Earth and its environment; and

(C) conduct such research and development in cooperation with other United States Government agencies and with public and private research entities (including private industry, universities, non-profit organizations, State and local governments, foreign governments, and international organizations) and to enter into arrangements (including joint ventures) which will foster such cooperation.

(b) ROLES OF DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF THE INTERIOR.—

(1) IN GENERAL.—In order to enhance the ability of the United States to manage and utilize its renewable and nonrenewable resources, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to conduct programs of research and development in the applications of remote sensing using funds appropriated for such purposes.

(2) ACTIVITIES THAT MAY BE INCLUDED.—Such programs may include basic research at universities, demonstrations of applications, and cooperative activities involving other Government agencies, private sector parties, and foreign and international organizations.

(c) ROLE OF OTHER FEDERAL AGENCIES.—Other United States Government agencies are authorized and encouraged to conduct research and development on the use of remote sensing in the fulfillment of their authorized missions, using funds appropriated for such purposes.

§ 1132. Availability of federally gathered unenhanced data

(a) IN GENERAL.—All unenhanced land remote sensing data gathered and owned by the United States Government, including unenhanced data

1 gathered under the technology demonstration program carried out pursuant
 2 to section 1133 of this title, shall be made available to users in a timely
 3 fashion.

4 (b) PROTECTION FOR COMMERCIAL DATA DISTRIBUTOR.—The President
 5 shall seek to ensure that unenhanced data gathered under the technology
 6 demonstration program carried out pursuant to section 1133 of this title
 7 shall, to the extent practicable, be made available on terms that would not
 8 adversely affect the commercial market for unenhanced data gathered by
 9 the Landsat 6 spacecraft.

10 **§ 1133. Technology demonstration program**

11 (a) ESTABLISHMENT.—As a fundamental component of a national land
 12 remote sensing strategy, the President shall establish, through appropriate
 13 United States Government agencies, a technology demonstration program.
 14 The goals of the program shall be to—

15 (1) seek to launch advanced land remote sensing system components
 16 within 5 years after October 28, 1992;

17 (2) demonstrate within such 5-year period advanced sensor capabili-
 18 ties suitable for use in the anticipated land remote sensing program;
 19 and

20 (3) demonstrate within such 5-year period an advanced land remote
 21 sensing system design that could be less expensive to procure and oper-
 22 ate than the Landsat system projected to be in operation through the
 23 year 2000, and that therefore holds greater potential for private sector
 24 investment and control.

25 (b) EXECUTION OF PROGRAM.—In executing the technology demonstra-
 26 tion program, the President shall seek to apply technologies associated with
 27 United States National Technical Means of intelligence gathering, to the ex-
 28 tent that such technologies are appropriate for the technology demonstration
 29 and can be declassified for such purposes without causing adverse harm to
 30 United States national security interests.

31 (c) BROAD APPLICATION.—To the greatest extent practicable, the tech-
 32 nology demonstration program established under subsection (a) shall be de-
 33 signed to be responsive to the broad civilian, national security, commercial,
 34 and foreign policy needs of the United States.

35 (d) PRIVATE SECTOR FUNDING.—The technology demonstration program
 36 under this section may be carried out in part with private sector funding.

37 (e) LANDSAT PROGRAM MANAGEMENT COORDINATION.—The Landsat
 38 Program Management shall have a coordinating role in the technology dem-
 39 onstration program carried out under this section.

SUBCHAPTER V—GENERAL PROVISIONS

§ 1141. Nondiscriminatory data availability

(a) IN GENERAL.—Except as provided in subsection (b), any unenhanced data generated by the Landsat system or any other land remote sensing system funded and owned by the United States Government shall be made available to all users without preference, bias, or any other special arrangement (except on the basis of national security concerns pursuant to section 1146 of this title) regarding delivery, format, pricing, or technical considerations which would favor one customer or class of customers over another.

(b) EXCEPTIONS.—Unenhanced data generated by the Landsat system or any other land remote sensing system funded and owned by the United States Government may be made available to the United States Government and its affiliated users at reduced prices, in accordance with this chapter, on the condition that such unenhanced data are used solely for noncommercial purposes.

§ 1142. Archiving of data

(a) PUBLIC INTEREST.—It is in the public interest for the United States Government to—

- (1) maintain an archive of land remote sensing data for historical, scientific, and technical purposes, including long-term global environmental monitoring;
- (2) control the content and scope of the archive; and
- (3) ensure the quality, integrity, and continuity of the archive.

(b) ARCHIVING PRACTICES.—The Secretary of the Interior, in consultation with the Landsat Program Management, shall provide for long-term storage, maintenance, and upgrading of a basic, global, land remote sensing data set (hereafter in this section referred to as the “basic data set”) and shall follow reasonable archival practices to ensure proper storage and preservation of the basic data set and timely access for parties requesting data.

(c) DETERMINATION OF CONTENT OF BASIC DATA SET.—In determining the initial content of, or in upgrading, the basic data set, the Secretary of the Interior shall—

- (1) use as a baseline the data archived on October 28, 1992;
- (2) take into account future technical and scientific developments and needs, paying particular attention to the anticipated data requirements of global environmental change research;
- (3) consult with and seek the advice of users and producers of remote sensing data and data products;
- (4) consider the need for data which may be duplicative in terms of geographical coverage but which differ in terms of season, spectral bands, resolution, or other relevant factors;

(5) include, as the Secretary of the Interior considers appropriate, unenhanced data generated either by the Landsat system, pursuant to subchapter II, or by licensees under subchapter III;

(6) include, as the Secretary of the Interior considers appropriate, data collected by foreign ground stations or by foreign remote sensing space systems; and

(7) ensure that the content of the archive is developed in accordance with section 1146 of this title.

(d) PUBLIC DOMAIN.—After the expiration of any exclusive right to sell, or after relinquishment of such right, the data provided to the National Satellite Land Remote Sensing Data Archive shall be in the public domain and shall be made available to requesting parties by the Secretary of the Interior at the cost of fulfilling user requests.

§ 1143. Nonreproduction

Unenhanced data distributed by any licensee under subchapter III may be sold on the condition that such data will not be reproduced or disseminated by the purchaser for commercial purposes.

§ 1144. Reimbursement for assistance

The Administrator, the Secretary of Defense, and the heads of other United States Government agencies may provide assistance to land remote sensing system operators under the provisions of this chapter. Substantial assistance shall be reimbursed by the operator, except as otherwise provided by law.

§ 1145. Acquisition of equipment

The Landsat Program Management may, by means of a competitive process, allow a licensee under subchapter III or any other private party to buy, lease, or otherwise acquire the use of equipment from the Landsat system, when such equipment is no longer needed for the operation of such system or for the sale of data from such system. Officials of other United States Government civilian agencies are authorized and encouraged to cooperate with the Secretary in carrying out this section.

§ 1146. Radio frequency allocation

(a) APPLICATION TO FEDERAL COMMUNICATIONS COMMISSION.—To the extent required by the Communications Act of 1934 (47 U.S.C. 151 et seq.), an application shall be filed with the Federal Communications Commission for any radio facilities involved with commercial remote sensing space systems licensed under subchapter III.

(b) DEADLINE FOR FCC ACTION.—It is the intent of Congress that the Federal Communications Commission complete the radio licensing process under the Communications Act of 1934 (47 U.S.C. 151 et seq.), upon the application of any private sector party or consortium operator of any com-

mercial land remote sensing space system subject to this chapter, within 120 days of the receipt of an application for such licensing. If final action has not occurred within 120 days of the receipt of such an application, the Federal Communications Commission shall inform the applicant of any pending issues and of actions required to resolve them.

(c) DEVELOPMENT AND CONSTRUCTION OF UNITED STATES SYSTEMS.—Authority shall not be required from the Federal Communications Commission for the development and construction of any United States land remote sensing space system (or component thereof), other than radio transmitting facilities or components, while any licensing determination is being made.

(d) CONSISTENCY WITH INTERNATIONAL OBLIGATIONS AND PUBLIC INTEREST.—Frequency allocations made pursuant to this section by the Federal Communications Commission shall be consistent with international obligations and with the public interest.

§ 1147. Consultation

(a) CONSULTATION WITH SECRETARY OF DEFENSE.—The Secretary and the Landsat Program Management shall consult with the Secretary of Defense on all matters under this chapter affecting national security. The Secretary of Defense shall be responsible for determining those conditions, consistent with this chapter, necessary to meet national security concerns of the United States and for notifying the Secretary and the Landsat Program Management promptly of such conditions.

(b) CONSULTATION WITH SECRETARY OF STATE.—

(1) IN GENERAL.—The Secretary and the Landsat Program Management shall consult with the Secretary of State on all matters under this chapter affecting international obligations. The Secretary of State shall be responsible for determining those conditions, consistent with this chapter, necessary to meet international obligations and policies of the United States and for notifying promptly the Secretary and the Landsat Program Management of such conditions.

(2) INTERNATIONAL AID.—Appropriate United States Government agencies are authorized and encouraged to provide remote sensing data, technology, and training to developing nations as a component of programs of international aid.

(3) REPORTING DISCRIMINATORY DISTRIBUTION.—The Secretary of State shall promptly report to the Secretary and Landsat Program Management any instances outside the United States of discriminatory distribution of Landsat data.

(c) STATUS REPORT.—The Landsat Program Management shall, as often as necessary, provide to Congress complete and updated information about the status of ongoing operations of the Landsat system, including timely no-

tification of decisions made with respect to the Landsat system in order to meet national security concerns and international obligations and policies of the United States Government.

(d) REIMBURSEMENTS.—If, as a result of technical modifications imposed on a licensee under subchapter III on the basis of national security concerns, the Secretary, in consultation with the Secretary of Defense or with other Federal agencies, determines that additional costs will be incurred by the licensee, or that past development costs (including the cost of capital) will not be recovered by the licensee, the Secretary may require the agency or agencies requesting such technical modifications to reimburse the licensee for such additional or development costs, but not for anticipated profits. Reimbursements may cover costs associated with required changes in system performance, but not costs ordinarily associated with doing business abroad.

§ 1148. Enforcement

(a) IN GENERAL.—In order to ensure that unenhanced data from the Landsat system received solely for noncommercial purposes are not used for any commercial purpose, the Secretary (in collaboration with private sector entities responsible for the marketing and distribution of unenhanced data generated by the Landsat system) shall develop and implement a system for enforcing this prohibition, in the event that unenhanced data from the Landsat system are made available for noncommercial purposes at a different price than such data are made available for other purposes.

(b) AUTHORITY OF SECRETARY.—Subject to subsection (d), the Secretary may impose any of the enforcement mechanisms described in subsection (c) against a person that—

(1) receives unenhanced data from the Landsat system under this chapter solely for noncommercial purposes (and at a different price than the price at which such data are made available for other purposes); and

(2) uses such data for other than noncommercial purposes.

(c) ENFORCEMENT MECHANISMS.—Enforcement mechanisms referred to in subsection (b) may include civil penalties of not more than \$10,000 (per day per violation), denial of further unenhanced data purchasing privileges, and any other penalties or restrictions the Secretary considers necessary to ensure, to the greatest extent practicable, that unenhanced data provided for noncommercial purposes are not used to unfairly compete in the commercial market against private sector entities not eligible for data at the cost of fulfilling user requests.

(d) PROCEDURES AND REGULATIONS.—The Secretary shall issue any regulations necessary to carry out this section and shall establish standards and procedures governing the imposition of enforcement mechanisms under

subsection (b). The standards and procedures shall include a procedure for potentially aggrieved parties to file formal protests with the Secretary alleging instances where such unenhanced data have been, or are being, used for commercial purposes in violation of the terms of receipt of such data. The Secretary shall promptly act to investigate any such protest, and shall report annually to Congress on instances of such violations.

SUBCHAPTER VI—PROHIBITION OF COMMERCIALIZATION OF WEATHER SATELLITES

§ 1161. Prohibition

Neither the President nor any other official of the Government shall make any effort to lease, sell, or transfer to the private sector, or commercialize, any portion of the weather satellite systems operated by the Department of Commerce or any successor agency.

§ 1162. Future considerations

Regardless of any change in circumstances subsequent to October 28, 1992, even if such change makes it appear to be in the national interest to commercialize weather satellites, neither the President nor any official shall take any action prohibited by section 1161 of this title unless this subchapter has first been repealed.

CHAPTER 13—SPACE COMMERCE

SUBCHAPTER I—DEFINITIONS

Sec.

1301. Definitions.

SUBCHAPTER II—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

1311. Commercialization of Space Station.

1312. Promotion of United States Global Positioning System standards.

1313. Acquisition of space science data.

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1315. Sources of Earth Science data.

SUBCHAPTER III—FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES

1331. Requirement to procure commercial space transportation services.

1332. Acquisition of commercial space transportation services.

1333. Shuttle privatization.

1334. Use of excess intercontinental ballistic missiles.

1335. National launch capability study.

SUBCHAPTER I—DEFINITIONS

§ 1301. Definitions

In this chapter:

(1) **COMMERCIAL PROVIDER.**—The term “commercial provider” means any person providing space transportation services or other space-related activities, primary control of which is held by persons other than Federal, State, local, and foreign governments.

(2) **PAYLOAD.**—The term “payload” means anything that a person undertakes to transport to, from, or within outer space, or in suborbital trajectory, by means of a space transportation vehicle, but does not in-

clude the space transportation vehicle itself except for its components which are specifically designed or adapted for that payload.

(3) SPACE-RELATED ACTIVITIES.—The term “space-related activities” includes research and development, manufacturing, processing, service, and other associated and support activities.

(4) SPACE TRANSPORTATION SERVICES.—The term “space transportation services” means the preparation of a space transportation vehicle and its payloads for transportation to, from, or within outer space, or in suborbital trajectory, and the conduct of transporting a payload to, from, or within outer space, or in suborbital trajectory.

(5) SPACE TRANSPORTATION VEHICLE.—The term “space transportation vehicle” means any vehicle constructed for the purpose of operating in, or transporting a payload to, from, or within, outer space, or in suborbital trajectory, and includes any component of such vehicle not specifically designed or adapted for a payload.

(6) STATE.—The term “State” means each of the several States of the Union, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States.

(7) UNITED STATES COMMERCIAL PROVIDER.—The term “United States commercial provider” means a commercial provider, organized under the laws of the United States or of a State, that is—

(A) more than 50 percent owned by United States nationals; or

(B) a subsidiary of a foreign company and the Secretary of Transportation finds that—

(i) such subsidiary has in the past evidenced a substantial commitment to the United States market through—

(I) investments in the United States in long-term research, development, and manufacturing (including the manufacture of major components and subassemblies); and

(II) significant contributions to employment in the United States; and

(ii) the country or countries in which such foreign company is incorporated or organized, and, if appropriate, in which it principally conducts its business, affords reciprocal treatment to companies described in subparagraph (A) comparable to that afforded to such foreign company’s subsidiary in the United States, as evidenced by—

(I) providing comparable opportunities for companies described in subparagraph (A) to participate in Government-sponsored research and development similar to that authorized under this chapter;

(II) providing no barriers, to companies described in subparagraph (A) with respect to local investment opportunities, that are not provided to foreign companies in the United States; and

(III) providing adequate and effective protection for the intellectual property rights of companies described in subparagraph (A).

SUBCHAPTER II—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

§ 1311. Commercialization of Space Station

Congress declares that a priority goal of constructing the International Space Station is the economic development of Earth orbital space. Congress further declares that free and competitive markets create the most efficient conditions for promoting economic development, and should therefore govern the economic development of Earth orbital space. Congress further declares that the use of free market principles in operating, servicing, allocating the use of, and adding capabilities to the Space Station, and the resulting fullest possible engagement of commercial providers and participation of commercial users, will reduce Space Station operational costs for all partners and the Federal Government's share of the United States burden to fund operations.

§ 1312. Promotion of United States Global Positioning System standards

(a) FINDING.—Congress finds that the Global Positioning System, including satellites, signal equipment, ground stations, data links, and associated command and control facilities, has become an essential element in civil, scientific, and military space development because of the emergence of a United States commercial industry which provides Global Positioning System equipment and related services.

(b) INTERNATIONAL COOPERATION.—In order to support and sustain the Global Positioning System in a manner that will most effectively contribute to the national security, public safety, scientific, and economic interests of the United States, Congress encourages the President to—

(1) ensure the operation of the Global Positioning System on a continuous worldwide basis free of direct user fees;

(2) enter into international agreements that promote cooperation with foreign governments and international organizations to—

1 (A) establish the Global Positioning System and its augmenta-
2 tions as an acceptable international standard; and

3 (B) eliminate any foreign barriers to applications of the Global
4 Positioning System worldwide; and

5 (3) provide clear direction and adequate resources to the Assistant
6 Secretary of Commerce for Communications and Information so that
7 on an international basis the Assistant Secretary can—

8 (A) achieve and sustain efficient management of the electro-
9 magnetic spectrum used by the Global Positioning System; and

10 (B) protect that spectrum from disruption and interference.

11 **§ 1313. Acquisition of space science data**

12 (a) DEFINITION OF SPACE SCIENCE DATA.—In this section, the term
13 “space science data” includes scientific data concerning—

14 (1) the elemental and mineralogical resources of the moon, asteroids,
15 planets and their moons, and comets;

16 (2) microgravity acceleration; and

17 (3) solar storm monitoring.

18 (b) ACQUISITION FROM COMMERCIAL PROVIDERS.—The Administrator
19 shall, to the extent possible and while satisfying the scientific or educational
20 requirements of the Administration, and where appropriate, of other Federal
21 agencies and scientific researchers, acquire, where cost effective, space
22 science data from a commercial provider.

23 (c) TREATMENT OF SPACE SCIENCE DATA AS COMMERCIAL ITEM UNDER
24 ACQUISITION LAWS.—Acquisitions of space science data by the Adminis-
25 trator shall be carried out in accordance with applicable acquisition laws
26 and regulations (including chapters 137 and 140 of title 10). For purposes
27 of such law and regulations, space science data shall be considered to be
28 a commercial item. Nothing in this subsection shall be construed to preclude
29 the United States from acquiring, through contracts with commercial pro-
30 viders, sufficient rights in data to meet the needs of the scientific and edu-
31 cational community or the needs of other government activities.

32 (d) SAFETY STANDARDS.—Nothing in this section shall be construed to
33 prohibit the Federal Government from requiring compliance with applicable
34 safety standards.

35 (e) LIMITATION.—This section does not authorize the Administration to
36 provide financial assistance for the development of commercial systems for
37 the collection of space science data.

38 **§ 1314. Administration of commercial space centers**

39 The Administrator shall administer the Commercial Space Center pro-
40 gram in a coordinated manner from Administration headquarters in Wash-
41 ington, D.C.

1 **§ 1315. Sources of Earth Science data**

2 (a) ACQUISITION.—The Administrator shall, to the extent possible and
3 while satisfying the scientific or educational requirements of the Administra-
4 tion, and where appropriate, of other Federal agencies and scientific re-
5 searchers, acquire, where cost-effective, space-based and airborne Earth re-
6 mote sensing data, services, distribution, and applications from a commer-
7 cial provider.

8 (b) TREATMENT AS COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Ac-
9 quisitions by the Administrator of the data, services, distribution, and appli-
10 cations referred to in subsection (a) shall be carried out in accordance with
11 applicable acquisition laws and regulations (including chapters 137 and 140
12 of title 10). For purposes of such law and regulations, such data, services,
13 distribution, and applications shall be considered to be a commercial item.
14 Nothing in this subsection shall be construed to preclude the United States
15 from acquiring, through contracts with commercial providers, sufficient
16 rights in data to meet the needs of the scientific and educational community
17 or the needs of other government activities.

18 (c) SAFETY STANDARDS.—Nothing in this section shall be construed to
19 prohibit the Federal Government from requiring compliance with applicable
20 safety standards.

21 (d) ADMINISTRATION AND EXECUTION.—This section shall be carried out
22 as part of the Commercial Remote Sensing Program at the Stennis Space
23 Center.

24 SUBCHAPTER III—FEDERAL ACQUISITION OF SPACE

25 TRANSPORTATION SERVICES

26 **§ 1331. Requirement to procure commercial space transpor-**
27 **tation services**

28 (a) IN GENERAL.—Except as otherwise provided in this section, the Fed-
29 eral Government shall acquire space transportation services from United
30 States commercial providers whenever such services are required in the
31 course of its activities. To the maximum extent practicable, the Federal
32 Government shall plan missions to accommodate the space transportation
33 services capabilities of United States commercial providers.

34 (b) EXCEPTIONS.—The Federal Government shall not be required to ac-
35 quire space transportation services under subsection (a) if, on a case-by-case
36 basis, the Administrator or, in the case of a national security issue, the Sec-
37 retary of the Air Force, determines that—

38 (1) a payload requires the unique capabilities of the space shuttle;

39 (2) cost effective space transportation services that meet specific
40 mission requirements would not be reasonably available from United
41 States commercial providers when required;

(3) the use of space transportation services from United States commercial providers poses an unacceptable risk of loss of a unique scientific opportunity;

(4) the use of space transportation services from United States commercial providers is inconsistent with national security objectives;

(5) the use of space transportation services from United States commercial providers is inconsistent with international agreements for international collaborative efforts relating to science and technology;

(6) it is more cost effective to transport a payload in conjunction with a test or demonstration of a space transportation vehicle owned by the Federal Government; or

(7) a payload can make use of the available cargo space on a space shuttle mission as a secondary payload, and such payload is consistent with the requirements of research, development, demonstration, scientific, commercial, and educational programs authorized by the Administrator.

(c) AGREEMENTS WITH FOREIGN ENTITIES.—Nothing in this section shall prevent the Administrator from planning or negotiating agreements with foreign entities for the launch of Federal Government payloads for international collaborative efforts relating to science and technology.

(d) DELAYED EFFECT.—Subsection (a) shall not apply to space transportation services and space transportation vehicles acquired or owned by the Federal Government before October 28, 1998, or with respect to which a contract for such acquisition or ownership has been entered into before October 28, 1998.

(e) HISTORICAL PURPOSES.—This section shall not be construed to prohibit the Federal Government from acquiring, owning, or maintaining space transportation vehicles solely for historical display purposes.

§ 1332. Acquisition of commercial space transportation services

(a) TREATMENT OF COMMERCIAL SPACE TRANSPORTATION SERVICES AS COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Acquisitions of space transportation services by the Federal Government shall be carried out in accordance with applicable acquisition laws and regulations (including chapters 137 and 140 of title 10). For purposes of such law and regulations, space transportation services shall be considered to be a commercial item.

(b) SAFETY STANDARDS.—Nothing in this section shall be construed to prohibit the Federal Government from requiring compliance with applicable safety standards.

1 **§ 1333. Shuttle privatization**

2 The Administrator shall prepare for an orderly transition from the Fed-
 3 eral operation, or Federal management of contracted operation, of space
 4 transportation systems to the Federal purchase of commercial space trans-
 5 portation services for all nonemergency space transportation requirements
 6 for transportation to and from Earth orbit, including human, cargo, and
 7 mixed payloads. In those preparations, the Administrator shall take into ac-
 8 count the need for short-term economies, as well as the goal of restoring
 9 the Administration's research focus and its mandate to promote the fullest
 10 possible commercial use of space. As part of those preparations, the Admin-
 11 istrator shall plan for the potential privatization of the space shuttle pro-
 12 gram. Such plan shall keep safety and cost effectiveness as high priorities.
 13 Nothing in this section shall prohibit the Administration from studying, de-
 14 signing, developing, or funding upgrades or modifications essential to the
 15 safe and economical operation of the space shuttle fleet.

16 **§ 1334. Use of excess intercontinental ballistic missiles**

17 (a) IN GENERAL.—The Federal Government shall not—

18 (1) convert any missile described in subsection (c) to a space trans-
 19 portation vehicle configuration; or

20 (2) transfer ownership of any such missile to another person, except
 21 as provided in subsection (b).

22 (b) AUTHORIZED FEDERAL USES.—

23 (1) IN GENERAL.—A missile described in subsection (c) may be con-
 24 verted for use as a space transportation vehicle by the Federal Govern-
 25 ment if, except as provided in paragraph (2) and at least 30 days be-
 26 fore such conversion, the agency seeking to use the missile as a space
 27 transportation vehicle transmits to the Committee on Armed Services
 28 and the Committee on Science of the House of Representatives, and
 29 to the Committee on Armed Services and the Committee on Commerce,
 30 Science, and Transportation of the Senate, a certification that the use
 31 of such missile—

32 (A) would result in cost savings to the Federal Government
 33 when compared to the cost of acquiring space transportation serv-
 34 ices from United States commercial providers;

35 (B) meets all mission requirements of the agency, including per-
 36 formance, schedule, and risk requirements;

37 (C) is consistent with international obligations of the United
 38 States; and

39 (D) is approved by the Secretary of Defense or the designee of
 40 the Secretary of Defense.

1 (2) EXCEPTION TO REQUIREMENT THAT CERTIFICATION BE TRANS-
 2 MITTED 30 DAYS BEFORE CONVERSION.—The requirement under para-
 3 graph (1) that the certification described in that paragraph must be
 4 transmitted at least 30 days before conversion of the missile shall not
 5 apply if the Secretary of Defense determines that compliance with that
 6 requirement would be inconsistent with meeting immediate national se-
 7 curity requirements.

8 (c) MISSILES REFERRED TO.—The missiles referred to in this section are
 9 missiles owned by the United States that—

10 (1) were formerly used by the Department of Defense for national
 11 defense purposes as intercontinental ballistic missiles; and

12 (2) have been declared excess to United States national defense
 13 needs and are in compliance with international obligations of the
 14 United States.

15 **§ 1335. National launch capability study**

16 (a) FINDINGS.—Congress finds that a robust satellite and launch indus-
 17 try in the United States serves the interest of the United States by—

18 (1) contributing to the economy of the United States;

19 (2) strengthening employment, technological, and scientific interests
 20 of the United States; and

21 (3) serving the foreign policy and national security interests of the
 22 United States.

23 (b) DEFINITIONS.—In this section:

24 (1) SECRETARY.—The term “Secretary” means the Secretary of De-
 25 fense.

26 (2) TOTAL POTENTIAL NATIONAL MISSION MODEL.—The term “total
 27 potential national mission model” means a model that—

28 (A) is determined by the Secretary, in consultation with the Ad-
 29 ministrator, to assess the total potential space missions to be con-
 30 ducted in the United States during a specified period of time; and

31 (B) includes all launches in the United States (including
 32 launches conducted on or off a Federal range).

33 (c) REPORT.—

34 (1) IN GENERAL.—Not later than 180 days after October 28, 1998,
 35 the Secretary shall, in consultation with the Administrator and appro-
 36 priate representatives of the satellite and launch industry and the gov-
 37 ernments of States and political subdivisions thereof—

38 (A) prepare a report that meets the requirements of this sub-
 39 section; and

(B) submit that report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science of the House of Representatives.

(2) REQUIREMENTS FOR REPORT.—The report prepared under this subsection shall—

(A) identify the total potential national mission model for the period beginning on the date of the report and ending on December 31, 2007;

(B) identify the resources that are necessary or available to carry out the total potential national mission model described in subparagraph (A), including—

(i) launch property and services of the Department of Defense, the Administration, and non-Federal facilities; and

(ii) the ability to support commercial launch-on-demand on short notification, taking into account Federal requirements, at launch sites or test ranges in the United States;

(C) identify each deficiency in the resources referred to in subparagraph (B); and

(D) with respect to the deficiencies identified under subparagraph (C), include estimates of the level of funding necessary to address those deficiencies for the period described in subparagraph (A).

(d) RECOMMENDATIONS.—Based on the report under subsection (c), the Secretary, after consultation with the Secretary of Transportation, the Secretary of Commerce, and representatives from interested private sector entities, States, and local governments, shall—

(1) identify opportunities for investment by non-Federal entities (including States and political subdivisions thereof and private sector entities) to assist the Federal Government in providing launch capabilities for the commercial space industry in the United States;

(2) identify one or more methods by which, if sufficient resources referred to in subsection (c)(2)(D) are not available to the Department of Defense and the Administration, the control of the launch property and launch services of the Department of Defense and the Administration may be transferred from the Department of Defense and the Administration to—

(A) one or more other Federal agencies;

(B) one or more States (or subdivisions thereof);

(C) one or more private sector entities; or

(D) any combination of the entities described in subparagraphs (A) to (C); and

- 1 (3) identify the technical, structural, and legal impediments associ-
 2 ated with making launch sites or test ranges in the United States via-
 3 ble and competitive.

4 **CHAPTER 15—COMMERCIAL REUSABLE IN-SPACE**
 5 **TRANSPORTATION**

Sec.

1501. Findings.

1502. Definitions.

1503. Loan guarantees for production of commercial reusable in-space transportation.

6 **§ 1501. Findings**

7 Congress makes the following findings:

8 (1) It is in the national interest to encourage the production of cost-
 9 effective, in-space transportation systems, which would be built and op-
 10 erated by the private sector on a commercial basis.

11 (2) The use of reusable in-space transportation systems will enhance
 12 performance levels of in-space operations, enhance efficient and safe
 13 disposal of satellites at the end of their useful lives, and increase the
 14 capability and reliability of existing ground-to-space launch vehicles.

15 (3) Commercial reusable in-space transportation systems will en-
 16 hance the economic well-being and national security of the United
 17 States by reducing space operations costs for commercial and national
 18 space programs and by adding new space capabilities to space oper-
 19 ations.

20 (4) Commercial reusable in-space transportation systems will provide
 21 new cost-effective space capabilities (including orbital transfers from
 22 low altitude orbits to high altitude orbits and return, the correction of
 23 erroneous satellite orbits, and the recovery, refurbishment, and refuel-
 24 ing of satellites) and the provision of upper stage functions to increase
 25 ground-to-orbit launch vehicle payloads to geostationary and other high
 26 energy orbits.

27 (5) Commercial reusable in-space transportation systems can en-
 28 hance and enable the space exploration of the United States by pro-
 29 viding lower cost trajectory injection from Earth orbit, transit trajec-
 30 tory control, and planet arrival deceleration to support potential Ad-
 31 ministration missions to Mars, Pluto, and other planets.

32 (6) Satellites stranded in erroneous Earth orbit due to deficiencies
 33 in their launch represent substantial economic loss to the United States
 34 and present substantial concerns for the current backlog of national
 35 space assets.

36 (7) Commercial reusable in-space transportation systems can provide
 37 new options for alternative planning approaches and risk management
 38 to enhance the mission assurance of national space assets.

(8) Commercial reusable in-space transportation systems developed by the private sector can provide in-space transportation services to the Administration, the Department of Defense, the National Reconnaissance Office, and other agencies without the need for the United States to bear the cost of production of such systems.

(9) The availability of loan guarantees, with the cost of credit risk to the United States paid by the private sector, is an effective means by which the United States can help qualifying private sector companies secure otherwise unattainable private financing for the production of commercial reusable in-space transportation systems, while at the same time minimizing Government commitment and involvement in the development of such systems.

§ 1502. Definitions

In this chapter:

(1) **COMMERCIAL PROVIDER.**—The term “commercial provider” means any person or entity providing commercial reusable in-orbit space transportation services or systems, primary control of which is held by persons other than the Federal Government, a State or local government, or a foreign government.

(2) **IN-SPACE TRANSPORTATION SERVICES.**—The term “in-space transportation services” means operations and activities involved in the direct transportation or attempted transportation of a payload or object from one orbit to another by means of an in-space transportation vehicle.

(3) **IN-SPACE TRANSPORTATION SYSTEM.**—The term “in-space transportation system” means the space and ground elements, including in-space transportation vehicles and support space systems, and ground administration and control facilities and associated equipment, necessary for the provision of in-space transportation services.

(4) **IN-SPACE TRANSPORTATION VEHICLE.**—The term “in-space transportation vehicle” means a vehicle designed—

(A) to be based and operated in space;

(B) to transport various payloads or objects from one orbit to another orbit; and

(C) to be reusable and refueled in space.

(5) **SECRETARY.**—The term “Secretary” means the Secretary of Defense.

(6) **UNITED STATES COMMERCIAL PROVIDER.**—The term “United States commercial provider” means any commercial provider organized under the laws of the United States that is more than 50 percent owned by United States nationals.

§ 1503. Loan guarantees for production of commercial reusable in-space transportation

(a) **AUTHORITY TO MAKE LOAN GUARANTEES.**—The Secretary may guarantee loans made to eligible United States commercial providers for purposes of producing commercial reusable in-space transportation services or systems.

(b) **ELIGIBLE UNITED STATES COMMERCIAL PROVIDERS.**—The Secretary shall prescribe requirements for the eligibility of United States commercial providers for loan guarantees under this section. Such requirements shall ensure that eligible providers are financially capable of undertaking a loan guaranteed under this section.

(c) **LIMITATION ON LOANS GUARANTEED.**—The Secretary may not guarantee a loan for a United States commercial provider under this section unless the Secretary determines that credit would not otherwise be reasonably available at the time of the guarantee for the commercial reusable in-space transportation service or system to be produced utilizing the proceeds of the loan.

(d) **CREDIT SUBSIDY.**—

(1) **COLLECTION REQUIRED.**—The Secretary shall collect from each United States commercial provider receiving a loan guarantee under this section an amount equal to the amount, as determined by the Secretary, to cover the cost, as defined in section 502(5) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)), of the loan guarantee.

(2) **PERIODIC DISBURSEMENTS.**—In the case of a loan guarantee in which proceeds of the loan are disbursed over time, the Secretary shall collect the amount required under this subsection on a pro rata basis, as determined by the Secretary, at the time of each disbursement.

(e) **OTHER TERMS AND CONDITIONS.**—

(1) **PROHIBITION ON SUBORDINATION.**—A loan guaranteed under this section may not be subordinated to another debt contracted by the United States commercial provider concerned, or to any other claims against such provider.

(2) **RESTRICTION ON INCOME.**—A loan guaranteed under this section may not—

(A) provide income which is excluded from gross income for purposes of chapter 1 of the Internal Revenue Code of 1986 (26 U.S.C. 1 et seq.); or

(B) provide significant collateral or security, as determined by the Secretary, for other obligations the income from which is so excluded.

(3) TREATMENT OF GUARANTEE.—The guarantee of a loan under this section shall be conclusive evidence of the following:

(A) That the guarantee has been properly obtained.

(B) That the loan qualifies for the guarantee.

(C) That, but for fraud or material misrepresentation by the holder of the loan, the guarantee is valid, legal, and enforceable.

(4) OTHER TERMS AND CONDITIONS.—The Secretary may establish any other terms and conditions for a guarantee of a loan under this section as the Secretary considers appropriate to protect the financial interests of the United States.

(f) ENFORCEMENT OF RIGHTS.—

(1) IN GENERAL.—The Attorney General may take any action the Attorney General considers appropriate to enforce any right accruing to the United States under a loan guarantee under this section.

(2) FORBEARANCE.—The Attorney General may, with the approval of the parties concerned, forbear from enforcing any right of the United States under a loan guaranteed under this section for the benefit of a United States commercial provider if such forbearance will not result in any cost, as defined in section 502(5) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)), to the United States.

(3) UTILIZATION OF PROPERTY.—Notwithstanding any other provision of law and subject to the terms of a loan guaranteed under this section, upon the default of a United States commercial provider under the loan, the Secretary may, at the election of the Secretary—

(A) assume control of the physical asset financed by the loan; and

(B) complete, recondition, reconstruct, renovate, repair, maintain, operate, or sell the physical asset.

(g) CREDIT INSTRUMENTS.—

(1) AUTHORITY TO ISSUE INSTRUMENTS.—Notwithstanding any other provision of law, the Secretary may, subject to such terms and conditions as the Secretary considers appropriate, issue credit instruments to United States commercial providers of in-space transportation services or systems, with the aggregate cost (as determined under the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.)) of such instruments not to exceed \$1,500,000,000, but only to the extent that new budget authority to cover such costs is provided in subsequent appropriations Acts or authority is otherwise provided in subsequent appropriations Acts.

(2) CREDIT SUBSIDY.—The Secretary shall provide a credit subsidy for any credit instrument issued under this subsection in accordance

with the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.).

(3) CONSTRUCTION.—The eligibility of a United States commercial provider of in-space transportation services or systems for a credit instrument under this subsection is in addition to any eligibility of such provider for a loan guarantee under other provisions of this section.

CHAPTER 17—COMMERCIAL SPACE COMPETITIVENESS

Sec.

1701. Findings.

1702. Definitions.

1703. Launch voucher demonstration program.

1704. Anchor tenancy and termination liability.

1705. Use of Government facilities.

1706. Commercial Space Achievement Award.

§ 1701. Findings

Congress finds that—

(1) commercial activities of the private sector have substantially contributed to the strength of both the United States space program and the national economy;

(2) a robust United States space transportation capability remains a vital cornerstone of the United States space program;

(3) the availability of commercial launch services is essential for the continued growth of the United States commercial space sector;

(4) a timely extension of the excess third party claims payment provisions of chapter 701 of title 49 is appropriate and necessary to enable the private sector to continue covering maximum probable liability risks while protecting the private sector from uninsurable levels of liability which could hinder international competitiveness;

(5) a program to demonstrate how recipients of Federal grants can purchase launch services directly from the private sector has the potential to improve the capabilities of the United States commercial launch industry;

(6) improvements and additions to the Nation's space transportation infrastructure contribute to a robust and cost effective space transportation capability for both public sector and private sector users;

(7) private sector use of available Government facilities on a reimbursable basis contributes to a stronger commercial space sector;

(8) the Federal Government should purchase space goods and services which are commercially available, or could be made available commercially in response to a Government procurement request, whenever such goods or services meet Government mission requirements in a cost effective manner;

(9) it is appropriate for the Government to act as an anchor tenant for commercial space development projects which have a reasonable po-

tential to develop non-Federal markets and which meet Federal needs in a cost effective manner; and

(10) the provision of compensation to commercial providers of space goods and services for termination of contracts at the convenience of the Government assists in enabling the private sector to invest in space activities which are initially dependent on Government purchases.

§ 1702. Definitions

In this chapter:

(1) AGENCY.—The term “agency” means an executive agency as defined in section 105 of title 5.

(2) ANCHOR TENANCY.—The term “anchor tenancy” means an arrangement in which the United States Government agrees to procure sufficient quantities of a commercial space product or service needed to meet Government mission requirements so that a commercial venture is made viable.

(3) COMMERCIAL.—The term “commercial” means having—

(A) private capital at risk; and

(B) primary financial and management responsibility for the activity reside with the private sector.

(4) COST EFFECTIVE.—The term “cost effective” means costing no more than the available alternatives, determined by a comparison of all related direct and indirect costs including, in the case of Government costs, applicable Government labor and overhead costs as well as contractor charges, and taking into account the ability of each alternative to accommodate mission requirements as well as the related factors of risk, reliability, schedule, and technical performance.

(5) LAUNCH.—The term “launch” means to place, or attempt to place, a launch vehicle and its payload, if any, in a suborbital trajectory, in Earth orbit in outer space, or otherwise in outer space.

(6) LAUNCH SERVICES.—The term “launch services” means activities involved in the preparation of a launch vehicle and its payload for launch and the conduct of a launch.

(7) LAUNCH SUPPORT FACILITIES.—The term “launch support facilities” means facilities located at launch sites or launch ranges that are required to support launch activities, including launch vehicle assembly, launch vehicle operations and control, communications, flight safety functions, and payload operations, control, and processing.

(8) LAUNCH VEHICLE.—The term “launch vehicle” means any vehicle constructed for the purpose of operating in or placing a payload in outer space or in suborbital trajectories, and includes components of that vehicle.

1 (9) PAYLOAD.—The term “payload” means an object which a person
 2 undertakes to launch, and includes subcomponents of the launch vehicle
 3 specifically designed or adapted for that object.

4 (10) PAYLOAD INTEGRATION SERVICES.—The term “payload inte-
 5 gration services” means activities involved in integrating multiple pay-
 6 loads into a single payload for launch or integrating a payload with a
 7 launch vehicle.

8 (11) SPACE RECOVERY SUPPORT FACILITIES.—The term “space re-
 9covery support facilities” means facilities required to support activities
 10 related to the recovery of payloads returned from space to a space re-
 11covery site, including operations and control, communications, flight
 12 safety functions, and payload processing.

13 (12) SPACE TRANSPORTATION INFRASTRUCTURE.—The term “space
 14 transportation infrastructure” means facilities, associated equipment,
 15 and real property (including launch sites, launch support facilities,
 16 space recovery sites, and space recovery support facilities) required to
 17 perform launch or space recovery activities.

18 (13) STATE.—The term “State” means the several States, the Dis-
 19 trict of Columbia, Puerto Rico, American Samoa, the United States
 20 Virgin Islands, Guam, the Northern Mariana Islands, and any other
 21 commonwealth, territory, or possession of the United States.

22 (14) UNITED STATES.—The term “United States” means the States,
 23 collectively.

24 **§ 1703. Launch voucher demonstration program**

25 (a) REQUIREMENT TO ESTABLISH PROGRAM.—The Administrator shall
 26 establish a demonstration program to award vouchers for the payment of
 27 commercial launch services and payload integration services for the purpose
 28 of launching payloads funded by the Administration.

29 (b) AWARD OF VOUCHERS.—The Administrator shall award vouchers
 30 under subsection (a) to appropriate individuals as a part of grants adminis-
 31 tered by the Administration for the launch of—

- 32 (1) payloads to be placed in suborbital trajectories; and
- 33 (2) small payloads to be placed in orbit.

34 (c) ASSISTANCE.—The Administrator may provide voucher award recipi-
 35 ents with such assistance (including contract formulation and technical sup-
 36 port during the proposal evaluation) as may be necessary to ensure the pur-
 37 chase of cost effective and reasonably reliable commercial launch services
 38 and payload integration services.

39 **§ 1704. Anchor tenancy and termination liability**

40 (a) ANCHOR TENANCY CONTRACTS.—Subject to appropriations, the Ad-
 41 ministrator or the Administrator of the National Oceanic and Atmospheric

Administration may enter into multiyear anchor tenancy contracts for the purchase of a good or service if the appropriate Administrator determines that—

(1) the good or service meets the mission requirements of the Administration or the National Oceanic and Atmospheric Administration, as appropriate;

(2) the commercially procured good or service is cost effective;

(3) the good or service is procured through a competitive process;

(4) existing or potential customers for the good or service other than the United States Government have been specifically identified;

(5) the long-term viability of the venture is not dependent upon a continued Government market or other nonreimbursable Government support; and

(6) private capital is at risk in the venture.

(b) TERMINATION LIABILITY.—

(1) IN GENERAL.—Contracts entered into under subsection (a) may provide for the payment of termination liability in the event that the Government terminates such contracts for its convenience.

(2) FIXED SCHEDULE OF PAYMENTS AND LIMITATION ON LIABILITY.—Contracts that provide for the payment of termination liability, as described in paragraph (1), shall include a fixed schedule of such termination liability payments. Liability under such contracts shall not exceed the total payments which the Government would have made after the date of termination to purchase the good or service if the contract were not terminated.

(3) USE OF FUNDS.—Subject to appropriations, funds available for such termination liability payments may be used for purchase of the good or service upon successful delivery of the good or service pursuant to the contract. In such case, sufficient funds shall remain available to cover any remaining termination liability.

(c) LIMITATIONS.—

(1) DURATION.—Contracts entered into under this section shall not exceed 10 years in duration.

(2) FIXED PRICE.—Such contracts shall provide for delivery of the good or service on a firm, fixed price basis.

(3) PERFORMANCE SPECIFICATIONS.—To the extent practicable, reasonable performance specifications shall be used to define technical requirements in such contracts.

(4) FAILURE TO PERFORM.—In any such contract, the appropriate Administrator shall reserve the right to completely or partially terminate the contract without payment of such termination liability because

of the contractor's actual or anticipated failure to perform its contractual obligations.

§ 1705. Use of Government facilities

(a) AUTHORITY.—

(1) IN GENERAL.—Federal agencies, including the Administration and the Department of Defense, may allow non-Federal entities to use their space-related facilities on a reimbursable basis if the Administrator, the Secretary of Defense, or the appropriate agency head determines that—

(A) the facilities will be used to support commercial space activities;

(B) such use can be supported by existing or planned Federal resources;

(C) such use is compatible with Federal activities;

(D) equivalent commercial services are not available on reasonable terms; and

(E) such use is consistent with public safety, national security, and international treaty obligations.

(2) CONSULTATION.—In carrying out paragraph (1)(E), each agency head shall consult with appropriate Federal officials.

(b) REIMBURSEMENT PAYMENT.—

(1) AMOUNT.—The reimbursement referred to in subsection (a) may be an amount equal to the direct costs (including salaries of United States civilian and contractor personnel) incurred by the United States as a result of the use of such facilities by the private sector. For the purposes of this paragraph, the term “direct costs” means the actual costs that can be unambiguously associated with such use, and would not be borne by the United States Government in the absence of such use.

(2) CREDIT TO APPROPRIATION.—The amount of any payment received by the United States for use of facilities under this subsection shall be credited to the appropriation from which the cost of providing such facilities was paid.

§ 1706. Commercial Space Achievement Award

(a) ESTABLISHMENT.—There is established a Commercial Space Achievement Award. The award shall consist of a medal, which shall be of such design and materials and bear such inscriptions as determined by the Secretary of Commerce. A cash prize may also be awarded if funding for the prize is available under subsection (d).

(b) CRITERIA FOR AWARD.—The Secretary of Commerce shall periodically make awards under this section to individuals, corporations, corporate

divisions, or corporate subsidiaries substantially engaged in commercial space activities that in the opinion of the Secretary of Commerce best meet the following criteria:

(1) NON-GOVERNMENTAL REVENUE.—For corporate entities, at least half of the revenues from the space-related activities of the corporation, division, or subsidiary is derived from sources other than the United States Government.

(2) SUBSTANTIAL CONTRIBUTION.—The activities and achievements of the individual, corporation, division, or subsidiary have substantially contributed to the United States gross national product and the stature of United States industry in international markets, with due consideration for both the economic magnitude and the technical quality of the activities and achievements.

(3) SUBSTANTIAL ADVANCEMENT OF TECHNOLOGY.—The individual, corporation, division, or subsidiary has substantially advanced space technology and space applications directly related to commercial space activities.

(c) LIMITATIONS.—No individual or corporate entity may receive an award under this section more than once every 5 years.

(d) FUNDING FOR AWARD.—The Secretary of Commerce may seek and accept gifts of money from public and private sources for the purpose of making cash prize awards under this section. Such money may be used only for that purpose, only such money may be used for that purpose, and the Secretary of Commerce shall make publicly available an itemized list of the sources of such funding.

SEC. 4. CONFORMING AMENDMENTS TO OTHER LAWS.

(a) TITLE 31.—Section 1304(a)(3)(D) of title 31, United States Code, is amended by striking “section 203 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2473)” and substituting “section 313 of title 51”.

(b) TITLE 35.—Section 210(a)(7) of title 35, United States Code, is amended by striking “section 305 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2457)” and substituting “section 335 of title 51”.

(c) TITLE 49.—Title 49, United States Code, is amended as follows:

(1) Section 70117(b)(2) is amended by striking “the Land Remote Sensing Policy Act of 1992 (15 U.S.C. 5601 et seq.)” and substituting “chapter 11 of title 51”.

(2) Section 70301(1) is amended by striking “section 502 of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993 (15 U.S.C. 5802)” and substituting “section 1702 of title 51”.

1 **SEC. 5. TRANSITIONAL AND SAVINGS PROVISIONS.**

2 (a) CUTOFF DATE.—This Act replaces certain provisions of law enacted
3 on or before April 30, 2005. If a law enacted after that date amends or
4 repeals a provision replaced by this Act, that law is deemed to amend or
5 repeal, as the case may be, the corresponding provision enacted by this Act.
6 If a law enacted after that date is otherwise inconsistent with this Act, it
7 supersedes this Act to the extent of the inconsistency.

8 (b) ORIGINAL DATE OF ENACTMENT UNCHANGED.—For purposes of de-
9 termining whether one provision of law supersedes another based on enact-
10 ment later in time, the date of enactment of a provision enacted by this Act
11 is deemed to be the date of enactment of the provision it replaced.

12 (c) REFERENCES TO PROVISIONS REPLACED.—A reference to a provision
13 of law replaced by this Act, including a reference in a regulation, order, or
14 other law, is deemed to refer to the corresponding provision enacted by this
15 Act.

16 (d) REGULATIONS, ORDERS, AND OTHER ADMINISTRATIVE ACTIONS.—A
17 regulation, order, or other administrative action in effect under a provision
18 of law replaced by this Act continues in effect under the corresponding pro-
19 vision enacted by this Act.

20 (e) ACTIONS TAKEN AND OFFENSES COMMITTED.—An action taken or
21 an offense committed under a provision of law replaced by this Act is
22 deemed to have been taken or committed under the corresponding provision
23 enacted by this Act.

24 **SEC. 6. REPEALS.**

25 The following provisions of law are repealed, except with respect to rights
26 and duties that matured, penalties that were incurred, or proceedings that
27 were begun before the date of enactment of this Act:

Schedule of Laws Repealed

Date of Enactment	Public Law	Section	Statutes at Large		U.S. Code Citations (informational)	
			Volume	Page	Former Classification	Restatement
July 29, 1958	85–568	101	72	426	42:2451 note	None.
		102	72	426	42:2451	51:302.
		103	72	427	42:2452	51:303.
		201	72	427	42:2471 (prior)	None.
		202	72	429	42:2472	51:311.
		203(a), (b)	72	429	42:2473(a), (b)	51:312.
		203(c)	72	429	42:2473(c)	51:313.
		204	72	431	42:2474	None.
		205	72	432	42:2475	51:314.
		206	72	432	42:2476	51:315.
		207 .....	.....	.....	42:2476a	51:316.
		208 .....	.....	.....	42:2476b	None.
		302	72	433	42:2453	None.
		303	72	433	42:2454	51:331.
		304(a)	72	433	42:2455(a)	51:332.
		304(e)	72	435	42:2456	51:333.
		304(f) .....	.....	.....	42:2456a	51:334.
		305	72	435	42:2457	51:335.
		306	72	437	42:2458	51:336.
		307 .....	.....	.....	42:2458a	51:337.
		308 .....	.....	.....	42:2458b	51:338.
		309 .....	.....	.....	42:2458c	51:339.
		310	72	438	42:2459	51:340.
		311 .....	.....	.....	42:2459b	51:341.
		312 .....	.....	.....	42:2459c	51:342.
		313 .....	.....	.....	42:2459f	51:343.
		315 .....	.....	.....	42:2459j	51:344.
		401 .....	.....	.....	42:2481	51:361.
		402 .....	.....	.....	42:2482	51:362.
		403 .....	.....	.....	42:2483	51:363.
		404 .....	.....	.....	42:2484	51:364.
June 15, 1959	86–45	4	73	75	42:2460	51:501.

Aug. 21, 1967	90–67	6	81	170	42:2477	51:582.
Sep. 29, 1969	91–76	1	83	124	42:2461 (1st par.)	51:541(a).
		2	83	124	42:2461 (last par.)	51:541(b).
July 30, 1977	95–76	6	91	315	42:2463	51:513.
Oct. 15, 1982	97–324	106(a)	96	1600	42:2464	51:551.
Dec. 5, 1985	99–170	201	99	1017	42:2466	51:561.
		202	99	1017	42:2466a	51:562.
		203	99	1017	42:2466b	51:563.
		204	99	1017	42:2466c	51:564.
Dec. 19, 1985	99–190	101(b) [title VIII, § 8111]	99	1185, 1222	42:2464a	51:552.
Oct. 30, 1987	100–147	201	101	869	42:2486 note	None.
		202	101	869	42:2486	51:701.
		203	101	869	42:2486a	51:702.
		204	101	870	42:2486b	51:703.
		205	101	871	42:2486c	51:704.
		206	101	872	42:2486d	51:705.
		207	101	873	42:2486e	51:706.
		208	101	873	42:2486f	51:707.
		209	101	874	42:2486g	51:708.
		210	101	874	42:2486h	51:709.
		211	101	875	42:2486i	51:710.
		213	101	875	42:2486k	51:711.
		214	101	875	42:2486l	None.
Aug. 19, 1988	100–404	(par. under heading “Science, Space, and Technology Education Trust Fund”)	102	1028	42:2467	51:571.
Nov. 9, 1989	101–144	(last par. beginning on p. 863)	103	863	42:2473b (1st par.)	51:514.
		(1st complete par. on p. 864)	103	864	42:2473b (last par.)	None.
Nov. 16, 1990	101–611	112(a)	104	3198	42:2465a(a)	51:553(a).
		112(b)	104	3198	42:2465a(b)	None.

Schedule of Laws Repealed—Continued

Date of Enactment	Public Law	Section	Statutes at Large		U.S. Code Citations (informational)	
			Volume	Page	Former Classification	Restatement
		112(c)	104	3199	42:2465a(c)	51:553(b).
		112(d)	104	3199	42:2465a(d)	51:553(c).
		203	104	3206	42:2465e	51:554(a).
		206	104	3207	42:2465f	51:554(b).
Oct. 28, 1991	102–139	(1st par. under heading “Administrative Provisions”)	105	771	42:2459d	51:511.
Dec. 9, 1991	102–195	19	105	1615	42:2459e	51:512.
		20	105	1615	42:2467a	51:572.
		21(a)	105	1616	42:2473e(a)	None.
		21(b) to (h)	105	1616	42:2473e(b) to (h)	51:581.
Oct. 28, 1992	102–555	1	106	4163	15:5601 note	None.
		2	106	4163	15:5601	51:1101.
		3	106	4164	15:5602	51:1102.
		101	106	4166	15:5611	51:1111.
		102	106	4168	15:5612	51:1112.
		103	106	4168	15:5613	None.
		104	106	4170	15:5614	51:1113.
		105(a), (b)	106	4170	15:5615(a), (b)	51:1114.
		105(c), (d)	106	4170	15:5615(c), (d)	None.
		201	106	4171	15:5621	51:1121.
		202	106	4172	15:5622	51:1122.
		203	106	4172	15:5623	51:1123.
		204	106	4173	15:5624	51:1124.
		205	106	4173	15:5625	51:1125.
		301	106	4174	15:5631	51:1131.
		302	106	4174	15:5632	51:1132.
		303(a) to (e)	106	4174	15:5633(a) to (e)	51:1133.
		303(f)	106	4175	15:5633(f)	None.
		501	106	4176	15:5651	51:1141.
		502	106	4176	15:5652	51:1142.
		503	106	4177	15:5653	51:1143.

Nov. 4, 1992	102–588	504	106 4177	15:5654	51:1144.
		505	106 4177	15:5655	51:1145.
		506	106 4177	15:5656	51:1146.
		507	106 4178	15:5657	51:1147.
		508	106 4179	15:5658	51:1148.
		601	106 4179	15:5671	51:1161.
		602	106 4180	15:5672	51:1162.
Oct. 28, 1998	102–588	304	106 5120	42:2467b	51:573.
		501	106 5122	15:5801	51:1701.
		502	106 5123	15:5802	51:1702.
		504(a) to (c)	106 5124	15:5803(a) to (c)	51:1703.
		504(d)	106 5124	15:5803(d)	None.
		506	106 5127	15:5805	None.
		507	106 5127	15:5806	51:1704.
		508	106 5128	15:5807	51:1705.
		510	106 5129	15:5808	51:1706.
		601	106 5130	42:2487	51:901.
		602	106 5130	42:2487a	51:902.
		603	106 5130	42:2487b	51:903.
		604	106 5131	42:2487c	51:904.
		606	106 5131	42:2487e	51:905.
		607	106 5131	42:2487f	51:906.
		608	106 5132	42:2487g	None.
Oct. 28, 1998	105–303	1(a)	112 2843	42:14701 note	None.
		2	112 2843	42:14701	51:1301.
		101(a)	112 2845	42:14711(a)	51:1311.
		101(b)	112 2845	42:14711(b)	None.
		104	112 2852	42:14712	51:1312.
		105	112 2852	42:14713	51:1313.
		106	112 2853	42:14714	51:1314.
		107(a)	112 2853	42:14715(a)	51:1315(a).
		107(b)	112 2853	42:14715(b)	51:1315(b).
		107(c)	112 2853	42:14715(c)	None.
		107(d)	112 2854	42:14715(d)	51:1315(e).
		107(e)	112 2854	42:14715(e)	51:1315(d).
		107(f)(1)	112 2854	42:14715, 15:5621	51:1121.
		107(f)(2)	112 2854	42:14715, 15:5622	51:1122.
		201	112 2854	42:14731	51:1331.
		202	112 2855	42:14732	51:1332.
		204(a)	112 2856	42:14733(a)	51:1333.
		204(b), (c)	112 2856	42:14733(b), (c)	None.
		205	112 2857	42:14734	51:1334.

Schedule of Laws Repealed—Continued

Date of Enactment	Public Law	Section	Statutes at Large		U.S. Code Citations (informational)	
			Volume	Page	Former Classification	Restatement
Oct. 30, 2000	106–391	206	112	2857	42:14735	51:1335.
		126	114	1585	42:2475a	51:591.
		301	114	1591	42:2459g	51:531.
		304	114	1592	42:2459h	51:532(b).
		305	114	1592	42:2475b	51:515.
Oct. 23, 2002	107–248	325	114	1600	42:2473d	51:533.
		901	116	1573	42:14701 note	None.
		902	116	1573	42:14751	51:1501.
		903	116	1574	42:14752	51:1503.
		904	116	1576	42:14753	51:1502.
Feb. 20, 2003	108–7	(4th par. on p. 520)	117	520	42:2459i	51:502.
Dec. 12, 2003	108–176	703	117	2579	42:2473e	51:574.